

MAINFREIGHT LOGISTICS

Environmental Management Plan

Prepared for:

Mainfreight Logistics
30 - 50 Yarrowa Street
Prestons NSW 2170

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Mainfreight Logistics (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference		Date	Prepared	Checked	Authorised
610.13053-R5	Revision 0	19 December 2013	Tanya Henley	Martin Doyle	Gary Graham
610.13053-R5	Revision 1	19 December 2013	Gemma Dawson	Gary Graham	Gary Graham
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1 Introduction

This Environmental Management Plan (EMP) has been prepared to manage the environmental impacts associated with the Mainfreight Logistics (Mainfreight) Warehousing and Distribution Centre (the Development) at 30 to 50 Yarrowa Street, Prestons. Mainfreight is a global logistics provider offering managed warehousing, and international and domestic freight forwarding.

The EMP is the primary document describing the management structure and strategies for maintaining environmental performance during the ongoing operation of the facility. It ensures compliance with relevant legislation and safeguards the safety and welfare of employees, tenants, local residents, and the public.

The EMP is a working document to be updated as necessary. Mainfreight will be responsible for ensuring that their operations comply with the provisions and measures contained within this EMP.

1.1 Development Background

Goodman Property Services obtained Development Consent SSD 5746 from the Department of Planning, Industry and Environment (DPIE) (formally known as the Department of Planning and Infrastructure) on 9 August 2013 for the construction and operation of the Warehousing and Distribution Centre to be operated by Mainfreight.

As of the date of writing this EMP the Development Consent SSD 5746 has been modified on one occasion. A modification application (MOD1) was approved on 27 May 2014. A summary of MOD1 is provided below:

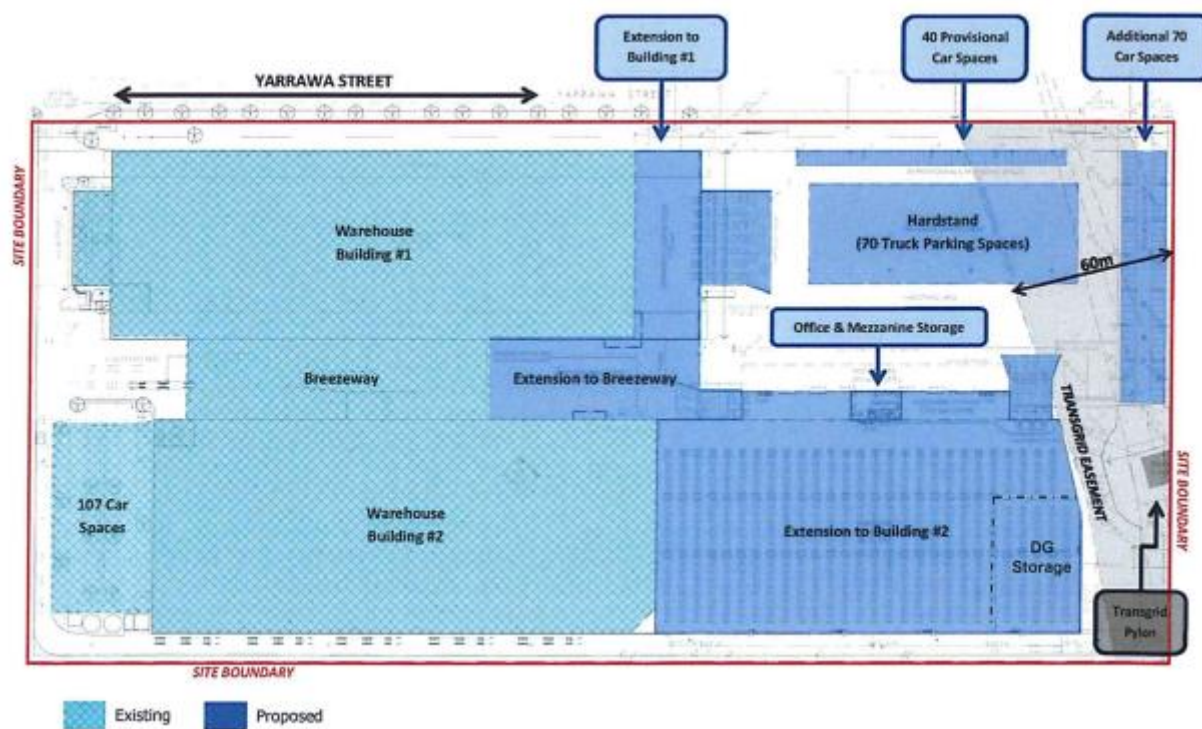
- Amend the floor area referred to within Condition B59a) to 45,577m² so that it includes the total warehouse floor area, office area and mezzanine storage area. Condition B5(a) previously granted consent for a total of 43,044m² of warehouse floor area but didn't include the office and storage floor areas.
- Increase the maximum storage capacity of Class 2.1 dangerous goods that may be stored within the site from 380,000kg to 400,000kg (i.e. an increase of 20,000kg); and,
- Allow heavy vehicle access to the site 24 hours, 7 days, to provide additional scheduling flexibility to Mainfreight's operations. Truck movements and restrictions will still adhere to all management and consent commitments stipulated in this report and the Development Consent.

The Development is located at 30 to 50 Yarrowa Street, Prestons. The area zoning is classified "IN3" or heavy industrial in accordance with Liverpool City Council's Local Environment Plan 2008. The site is located in an area of relatively flat terrain, with Cabramatta Creek to the west, Yarrowa Street on the northern boundary, Bernera Road to the east and Yarrunga Street to the south. **Figure 1** shows the Development site location within the local government area (LGA) of Liverpool City Council.

The Development provides pick up, storage, dispatch and delivering services from individual parcels to shipping containers, including the storage of dangerous goods. Operational activities that occur on the expanded site are receipt, storage and dispatch of products as part of the company's bulk warehousing and distribution services.

The operational hours of the distribution centre are Monday to Sunday, 24 hours per day. Heavy vehicle movements and restrictions are outlined in this document and will be adhered too accordingly.

Figure 1 Development Layout



1.2 Environmental Management Plan

1.2.1 Scope

This EMP has been prepared to satisfy Condition D1 of Development Consent SSD 5746. The specific requirements of this consent condition, along with where these requirements have been addressed within this document, are listed in **Table 1**.

Table 1 EMP Scope

Condition D1 of Development Consent SSD 5746	EMP Section
Environmental Management Plan The Applicant shall prepare and implement an Environmental Management Plan for the development to the satisfaction of the Secretary. This plan must:	This document
(a) be submitted to the Secretary for consent prior to commencement of any construction works;	Noted. The original EMP was submitted for approval prior to commencement of operation.
(b) be prepared by a suitably qualified and experienced expert;	Noted.
(c) provide the strategic framework for environmental management of the development;	Section 2
(d) identify the statutory requirements that apply to the development;	Section 2.2
(e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development;	Section 2.1
(f) describe in detail the management measures that would be implemented to address environmental issues;	Section 4
(g) describe in general how the environmental performance of the development would be monitored and managed;	Sections 4 and 5
(h) describe the procedures that would be implemented to: - keep the local community and relevant agencies informed about the operation and environmental performance of the development; - receive, handle, respond to, and record complaints; - resolve any disputes that may arise during the course of the development; - respond to any non-compliances; and - respond to emergencies; and	- Sections 2.3, 2.4, 2.5, 2.6 and 2.7 - Section 2.6 - Section 2.7 - Sections 2.5, 2.6 and 3 - Section 2.5
(i) include copies of the various strategies and plans that are required under the conditions of this consent once they have been approved.	Appendices B to E

1.2.2 Objectives

The general objectives of this EMP are to:

- The application of best practice environmental management;
- The relevant commitments made in the EIS (McKenzie Group Planning, 2013) are fully implemented and/or complied with;
- The relevant conditions imposed by Development Consent SSD 5746 are fully implemented and/or complied with; and
- Environmental risks associated with the operation of the development are properly managed.

2 Environmental Management

2.1 Roles and Responsibilities

The Site Branch Managers have the primary responsibility for implementing the EMP during operations. This responsibility includes monitoring the EMP's effectiveness and rectifying any deficiencies in the EMP. The Site Branch Managers may delegate some responsibilities to other staff members as appropriate.

All employees engaged in the works must comply with the terms and conditions of the EMP and adopt the clear procedures for management of environmental impacts, including corrective actions.

Table 2 below outlines the delegated environmental responsibilities for the Development.

Table 2 Environmental Responsibilities

Role	Responsibilities
Site Branch Managers	- Overall responsibility for environmental management and compliance with the Development Consent and relevant legislation; - Coordinate routine site inspections and maintenance; - Coordinate necessary environmental monitoring, reporting and auditing, along with necessary regulatory authority liaisons; - Record, notify, investigate and respond to any complaints and/or enquiries and, where necessary, develop and implement corrective actions; - Record, notify, investigate and respond to any environmental incidents and, where necessary, develop and implement corrective actions; - Oversee the implementation of this EMP and provide adequate resources to enable implementation of this EMP; and - Provide adequate environmental inductions/training to employees and contractors regarding their requirements under this EMP.
All employees and contractors	- Ensure familiarity, implementation and compliance with this EMP and appended management plans; - Support the company's commitment to environmental management and compliance; - Work in a manner that will not harm the environment or impact on surrounding receptors; - Report all environmental incidents and complaints to the Site Branch Managers without delay; and - Report any inappropriate operational and/or environmental management practices to the Site Branch Managers without delay.

2.2 Development Consent

Mainfreight obtained Development Consent SSD 5746 on the 09 August 2013 for the overall development. At the time of preparing this document, one application to modify SSD 5746 had been approved. Further details are provided in **Section 1.1**.

A copy of Development Consent SSD 5746 and the Notices of Modification for the approved Mod are contained in **Appendix A**.

Development Consent SSD 5746 as modified imposes a number of environmental performance and management requirements applicable to on-going operations. These conditions are listed in **Table 3** (Note: administrative conditions not relevant to the operational phase of the estate and conditions relating to construction works have not been included).

Table 3 Relevant Consent Conditions for Environmental Performance and Management

Development Consent SSD 5746 (as modified)	Relevance to this Report
Schedule B – Administrative Conditions	
Obligation to minimise Harm to the Environment	
B1. The Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the development.	Section 4
Terms of Consent	
B2. The Applicant shall carry out the Development in accordance with the : (a) EIS; (b) RTS; (c) plans and elevations (see Appendix 1); (d) statement of commitments (Appendix 2); (e) conditions of this consent; and (f) SSD 5746 MOD 1.	Noted
B3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.	Noted
B4. The Applicant shall comply with any reasonable requirement/s of the Secretary arising from the Department's assessment of: (a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this consent; and (b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.	Noted – no requirements have been specified by DPHI as a result of this condition
Limits of Consent	
The Applicant must ensure that the total area of: (a) the number of truck movements between the hours of 10:00pm and 5:00am shall be restricted to a maximum number of 40; (b) the dangerous goods area does not exceed 1,570m ² ; and (c) the breezeway does not exceed 5,822m ² .	Noted

Development Consent SSD 5746 (as modified)				Relevance to this Report																								
B6. The storage of dangerous goods on site shall not exceed the quantities provided in Table 1 at any one time. Table 1: Dangerous Goods Storage <table><tr><th>Hazardous Material</th><th>Dangerous Goods Class</th><th>Approximate Operating Quantity (kg)</th><th>Total Storage Capacity (kg)</th></tr><tr><td>Aerosols*</td><td>2.1</td><td>347,260</td><td>400,000</td></tr><tr><td>Flammable and Combustible Liquids</td><td>3</td><td>83,820</td><td>88,660</td></tr><tr><td>Oxidising Agents</td><td>5.1</td><td>63,698</td><td>78,500</td></tr><tr><td>Corrosive Substances</td><td>8</td><td>1,165</td><td>1,500</td></tr><tr><td>Miscellaneous Dangerous Goods</td><td>9</td><td>4,249</td><td>4,620</td></tr></table> <i>Note: These quantities are for the total combined weight of packaging and content as described in the Preliminary Hazard Analysis.</i>				Hazardous Material	Dangerous Goods Class	Approximate Operating Quantity (kg)	Total Storage Capacity (kg)	Aerosols*	2.1	347,260	400,000	Flammable and Combustible Liquids	3	83,820	88,660	Oxidising Agents	5.1	63,698	78,500	Corrosive Substances	8	1,165	1,500	Miscellaneous Dangerous Goods	9	4,249	4,620	An Acknowledgement Notification of Hazardous Chemicals on Premises by SafeWork NSW (Acknowledgement Number NDG023563) is attached as Appendix B
Hazardous Material	Dangerous Goods Class	Approximate Operating Quantity (kg)	Total Storage Capacity (kg)																									
Aerosols*	2.1	347,260	400,000																									
Flammable and Combustible Liquids	3	83,820	88,660																									
Oxidising Agents	5.1	63,698	78,500																									
Corrosive Substances	8	1,165	1,500																									
Miscellaneous Dangerous Goods	9	4,249	4,620																									
Statutory Requirements																												
B11. The Applicant shall ensure that all necessary licences, permits and approvals are obtained and kept up- to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.				Section 6																								
Operation of Plant and Equipment																												
B12. The Applicant shall ensure that all plant and equipment used for the development is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.				Noted																								
Dispute Resolution																												
B18. In the event that a dispute arises between the Applicant and Council or a public authority other than the Department, in relation to a specification or requirement applicable under this consent, the matter must be referred by either party to the Secretary, or if not resolved, to the Minister, whose determination of the dispute shall be final and binding to all parties. For the purpose of this condition, ‘public authority’ has the same meaning as provided under Section 4 of the Act.				Section 2.7																								
Schedule C – Environmental Performance Conditions																												
Hazards and Risk																												

Development Consent SSD 5746 (as modified)	Relevance to this Report
On-going <u>Hazard Audit</u> C5. Twelve months after the commencement of operations of the development and every three years thereafter, or at such intervals as the Secretary may agree, the Applicant shall carry out a comprehensive Hazard Audit of the development and within one month of each audit submit a report to the Secretary for approval. The audits shall be carried out at the Applicant's expense by a qualified person or team, independent of the development, approved by the Secretary prior to commencement of each audit. Hazard Audits shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'. The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.	Section 5
<u>Further Requirements</u> C6. The Applicant shall comply with all reasonable requirements of the Secretary in respect of the implementation of any measures arising from the reports submitted in respect of Conditions C1 to C5 inclusive, within such time as the Secretary may agree.	Noted
Bushfire Management	
C7. The Applicant shall manage the site in accordance with the Bushfire Protection Assessment report prepared by Australian Bushfire Planners Pty Ltd and dated 12 January 2013 (B121914), Planning for Bush Fire Protection (NSW RFS, 2006) and Standards for Asset Protection Zones (NSW RFS, 2006) in consultation with the NSW RFS to the satisfaction of the Secretary. The management measures to be implemented on the site shall be set out in the Environmental Management Plan (see Condition D1).	Section 4 and Appendix C
C9. The Applicant shall: (a) implement suitable measures to minimise the risk of fire on site; (b) extinguish any fires on site promptly; and (c) maintain adequate fire-fighting capacity on site, including water supply in accordance with the requirements of the BCA and AS 2419.1, 2005.	Section 4
Traffic and Access	

Development Consent SSD 5746 (as modified)	Relevance to this Report
Operating Conditions C10. The Applicant shall ensure that: (a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the development are constructed and maintained in accordance with the relevant standards and the latest versions of AS 2890.1, AS 2890.2 and AS/NZS 2890.6; (b) the swept path of the longest vehicle (to service the site) entering and exiting the subject site, as well as manoeuvrability through the site, must be in accordance with AUSTROADS. (c) the development does not result in any vehicles queuing on the public road network; (d) heavy vehicles and bins associated with the development do not park or stand on local roads or footpaths in the vicinity of the site; (e) all vehicles are wholly contained on site before being required to stop; (f) all vehicles enter and exit the site in a forward direction; (g) all loading and unloading of materials is carried out on site (h) the proposed loading areas and turning areas in the car park are kept clear of any obstacles, including parked vehicles, at all times; (i) the eastern most truck access driveway shall be line marked and sign posted to clearly indicate that this access driveway will permit entry movements only; (j) between the hours of 7:00pm and 5:00am, heavy vehicles must only enter and leave the site via the central and eastern most truck access driveways located in Yarrawa Street, Prestons, which serve the new truck and car hardstand area located to the east of Building 1 (the front building) and to the north of Building 2 (the rear building); (k) a -warning sign is installed at the western most vehicle access point- located in Yarrawa Street, warning drivers that trucks must not enter or leave the premises via this driveway between the hours of 7:00pm and 5:00am; and (l) appropriate controls and systems, developed in consultation with the EPA and to the satisfaction of the Secretary, are put in place to stop trucks entering or leaving the western most access driveway between the hours of 7:00pm and 5:00am.	Section 4
Traffic Management Plan C17. Prior to commencement of construction, the Applicant shall prepare and implement a Traffic Management Plan (TMP) for the development in consultation with Council, to the satisfaction of the Secretary. The Plan shall at minimum: (a) be prepared by a suitably qualified and experienced expert; (b) detail the number and frequency of truck movements, size of trucks, vehicle routes, hours of construction and operation; (c) provide the estimated duration and staging of construction works; (d) detail the access and parking arrangements for construction and operational vehicles during both construction and operations to ensure road and site safety, and demonstrate that there will be no queuing on Yarrawa Road; (e) include a Truck Operational Management Plan (TOMP) that will ensure that the proposed stacked truck parking is managed in an orderly manner. (f) include a Driver Code of Conduct that details traffic management measures to be implemented during construction and operations to: (i) minimise impacts of the development on the local and regional road network; (ii) minimise conflicts with other road users; and (iii) ensure truck drivers use those routes specified.	Section 4
Soil and Water	
Bunding C20. The Applicant shall store all liquid chemicals, fuels and oils used on-site in appropriately banded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's <i>Storing and Handling Liquids: Environmental Protection – Participants Handbook</i>.	Section 4

Development Consent SSD 5746 (as modified)	Relevance to this Report									
Spill Management C21. The Applicant shall ensure that the following requirements are complied with at all times to prevent and manage spills and leaks entering the stormwater system: (a) the isolation valves located in the stormwater system are to be clearly labelled; (b) a Maintenance/Service Plan is to be put in place to ensure that the stormwater isolation valves are maintained in a serviceable condition; (c) all external stormwater drains are to be clearly identified as stormwater drains; (d) spill kits are to be located and maintained adjacent to external trafficable areas of the premises; and (e) the breezeway is to be fully isolated from the stormwater system at all times.	Section 4									
Stormwater Management C22. The stormwater management system shall be designed, constructed and operated in accordance with the Civil Engineering Report (including plans) prepared by Costin Roe dated 21 May 2013, Revision C, and to the satisfaction of Council and the EPA.	Noted									
C23. The Applicant shall provide and maintain easements for stormwater and overland flow paths from DP 28729 Lots 10 and 11 to the south of the site, as identified in the Civil Engineering Report (including plans) prepared by Costin Roe dated 21 May 2013, Revision C, to the satisfaction of Council.	Noted									
Noise and Vibration										
Operational Hours C27. The development shall comply with the operational hours in Table 2 for the site, unless otherwise agreed in writing by the EPA. Table 2: Operating Hours <table><tr><th>Activity</th><th>Day</th><th>Hours</th></tr><tr><td>Operations</td><td>Monday - Sunday</td><td>24 hours</td></tr></table>	Activity	Day	Hours	Operations	Monday - Sunday	24 hours	Section 1.1			
Activity	Day	Hours								
Operations	Monday - Sunday	24 hours								
Operational Noise Criteria C29. The development shall ensure that the noise generated by the development does not exceed the criteria in Table 4 at any private residential receiver. Table 4: Noise impact assessment criteria dB(A) <table><tr><th>Location</th><th>LAeq (15 minute) (Day, Evening, Night)</th><th>LA1, 1min Night Time (Sleep Disturbance)</th></tr><tr><td>22 Michelago Circuit, Prestons</td><td>37</td><td>45</td></tr><tr><td>23 Coffs Harbour Ave, Hoxton Park</td><td>39</td><td>45</td></tr></table> <i>Notes: Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.</i>	Location	LAeq (15 minute) (Day, Evening, Night)	LA1, 1min Night Time (Sleep Disturbance)	22 Michelago Circuit, Prestons	37	45	23 Coffs Harbour Ave, Hoxton Park	39	45	Noted
Location	LAeq (15 minute) (Day, Evening, Night)	LA1, 1min Night Time (Sleep Disturbance)								
22 Michelago Circuit, Prestons	37	45								
23 Coffs Harbour Ave, Hoxton Park	39	45								

Development Consent SSD 5746 (as modified)	Relevance to this Report
Operating Conditions C30. The Applicant shall: (a) implement best management practice, including all reasonable and feasible noise management and mitigation measures to prevent and minimise construction, operational, low frequency and traffic noise generated by the development; (b) where practicable, keep all roller doors closed during the night time period; (c) minimise the noise impacts of the development during adverse meteorological conditions when noise criteria do not apply; (d) maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired; (e) modify and/or stop operations to ensure compliance with the relevant conditions of this consent (f) ensure that the sound power levels of the container handler do not exceed 103dB(A)Leq; (g) provide all truck drivers with regular training and instructions in minimising the noise impacts of operating their vehicles; (h) ensure that all trucks and delivery vehicles switch off their engines during idle periods or during loading / unloading operations, particularly during the night time hours; and (i) ensure that no external public address system is used on site.	Section 4
Noise Management Plan C31. The Proponent shall prepare and implement a Noise Management Plan for the development in consultation with the EPA and to the satisfaction of the Secretary. The plan must: (a) be prepared and implemented by a suitably qualified and experienced person whose appointment has been approved by the Secretary; (b) be submitted for approval by the Secretary prior to commencement of construction; (c) describe the measures that will be implemented to minimise noise from the construction and operation of the project including: • best management practice is being employed on site; • traffic management noise is effectively managed; and • the noise impacts of the project are minimised during any meteorological conditions when the noise criteria in this approval do not apply; • compliance with the relevant conditions of this approval. (d) describe the noise management system; (e) includes a noise monitoring program that: • is capable of evaluating the performance of the project; • includes a protocol for determining exceedances of the relevant conditions of this approval and responding to complaints; • adequately supports the noise management system; and • evaluates and reports on the effectiveness of the noise management system.	Section 4
Air Quality	
Discharge Limits C32. The Applicant shall ensure that the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).	Section 4

Development Consent SSD 5746 (as modified)	Relevance to this Report
Air Quality Discharges C33. The Applicant shall: (a) implement all reasonable and feasible mitigation measures to prevent and minimise dust and odour emissions from the development; (b) minimise any visible off-site air pollution that occurs as a result of this development; and (c) minimise surface disturbance within the site, other than as permitted under this consent.	Section 4
Energy Efficiency C34. The Applicant shall prepare and implement an Energy Efficiency Program for the development, to the satisfaction of the Secretary. The program must: (a) be approved by the Secretary prior to commencement of construction; (b) compare the proposed energy usage of the development to other existing Australian warehouse centres, and set benchmarks for industry best practice; (c) investigate reasonable and feasible energy efficiency measures available; (d) describe the measures that would be implemented onsite, demonstrating the use of best available technology; and (e) include a program to monitor and report annually on the efficiency of the measures implemented and ensure the development will continue to operate at industry best practice over time.	Sections 4 and 5
Air Conditioners C35. The Applicant shall design, install and operate all air and water heating and cooling systems in accordance with the <i>Public Health Act 1991</i> and to the satisfaction of Council.	Section 4
Waste	
C36. The Applicant shall ensure that all waste generated during the Operation of the development is stored, handled and disposed of in accordance with the EPA's Waste Classification Guidelines and disposed of to a facility that may lawfully accept the waste.	Section 4
Waste Management C37. The Proponent shall prepare and implement a Waste Management Plan for the development to the satisfaction of the Secretary. This Plan shall: (a) be prepared in consultation with the EPA by a suitably qualified and experienced expert whose (b) appointment has been endorsed by the Secretary; (c) be approved by the Secretary prior to the commencement of operations; (d) detail the type and quantity of waste to be generated by the operation of the development; (e) detail the materials to be reused or recycled, either on or off-site; and (f) detail the procedures for handling, storage, collection of recycling and disposal of waste.	Section 4
C38. For the life of the development, the Applicant shall: (a) monitor the amount of waste generated by the development; (b) investigate ways to minimise waste generated by the development; (c) implement reasonable and feasible measures to minimise waste generated by the development, to the satisfaction of the Secretary.	Section 4
Visual Amenity and Design	

Development Consent SSD 5746 (as modified)		Relevance to this Report
Lighting C39. The Applicant shall ensure that the lighting associated with the development: (a) complies with the latest version of <i>AS 4282 (INT) - Control of Obtrusive Effects of Outdoor Lighting</i>; and (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.		Noted
Landscape and Biodiversity		
C42. The Applicant shall undertake landscaping generally in accordance with the approved Landscape Plans contained in Appendix 7 of the EIS to the satisfaction of Council, subject to the following amendments: (a) the 'Accent Species' and 'Groundcovers' must be amended to include only species listed in the Liverpool Council <i>Recommended Plan Species List for Landscaping</i> (Appendix 2, Part 1.1 of the Liverpool DCP 2008); and (b) the proposed <i>Corymbia maculate</i> (Spotted Gum) must be replaced with <i>Eucalyptus tereticornis</i> (Forest Red Gum). The Applicant must maintain landscaping for the life of the development, in accordance in accordance with the Bushfire Protection Assessment report prepared by Australian Bushfire Planners Pty Ltd dated 12 January 2013 (B121914), <i>Planning for Bush Fire Protection</i> (NSW RFS, 2006) and <i>Standards for Asset Protection Zones</i> (NSW RFS, 2006) in consultation with the NSW RFS to the satisfaction of the Secretary.		Section 4
Security		
C43. The Applicant shall: (a) install and maintain a perimeter stock fence and security gates on the site; and (b) ensure that the security gates on site are locked whenever the site is unattended.		Noted
Transgrid Easement and Infrastructure		
Access and Operations within the Easement C45. To protect and allow ongoing maintenance of the transmission tower, and to ensure that the construction and operation of the development minimises potential impacts to TransGrid's infrastructure, all works and activities associated with the development must be carried out in accordance with TransGrid submission (including their Easement Guidelines for Third Party Development) in consultation with Transgrid and to the satisfaction of the Secretary.		Noted
C46. The Applicant must not store any dangerous goods within the TransGrid easement.		Noted
Schedule D – Environmental Management, Reporting and Auditing		
Environmental Management		
Environmental Management Plan D1. The Applicant shall prepare and implement an Environmental Management Plan for the development to the satisfaction of the Secretary. This plan must: (a) be submitted to the Secretary for consent prior to commencement of any construction works; (b) be prepared by a suitably qualified and experienced expert; (c) provide the strategic framework for environmental management of the development; (d) identify the statutory requirements that apply to the development; (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development; (f) describe in detail the management measures that would be implemented to address environmental issues;		This document See Table 1

Development Consent SSD 5746 (as modified)	Relevance to this Report
(g) describe in general how the environmental performance of the development would be monitored and managed; (h) describe the procedures that would be implemented to: • keep the local community and relevant agencies informed about the operation and environmental performance of the development; • receive, handle, respond to, and record complaints; • resolve any disputes that may arise during the course of the development; • respond to any non-compliances; and • respond to emergencies; • ensure that a 24 contact phone number is made available to the community for the receipt of any complaints; and • make the register of complaints available to the department and Council if requested. (i) include copies of the various strategies and plans that are required under the conditions of this consent once they have been approved.	This document See Table 1
Reporting	
Incident Reporting D3. The Applicant shall notify the Secretary and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the development as soon as practicable after the Applicant becomes aware of the incident.	Section 2.5
D4. Within 7 days of notifying the incident, the Applicant shall provide a written report to the Department and EPA that: (a) describes the date, time, and nature of the incident; (b) identifies the cause, or likely cause, of the incident; and (c) describes what action has been taken to date address the incident and what actions are proposed to be implemented in the future to either address the consequences of the incident or avoid a recurrence of the incident.	Section 2.5
Annual Review D5. One year after the commencement of operation, and annually thereafter, unless the Secretary directs otherwise, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. The review shall: (a) describe the operations that were carried out in the past year; (b) analyse the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EIS; (c) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance; (d) identify any trends in the monitoring data over the life of the development; (e) provide a summary of results required for the EPL; and (f) describe what measure will be implemented over the next year to improve the environmental performance of the development.	Noted

Development Consent SSD 5746 (as modified)	Relevance to this Report
Revision of Strategies, Plans and Programs F9. Within three months of the submission of an: (a) incident report under Condition D4 of this schedule; (b) annual review under Condition D5 of this schedule; (c) any modifications to this consent, the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary. <i>Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</i>	Section 6.2

2.3 Environmental Protection Licence

Mainfreight was issued Environmental Protection Licence (EPL) 21221 on the 15 March 2019 for the site's overall compliance conditions. The EPL authorises the scheduled activities, along with the fee-based activity classification and scale of the operation. The Development specific EPL scheduled activities are as follows:

- Schedule Activity: Chemical Storage
- Fee Based Activity: General chemicals storage
- Scale: > 100000 kL storage capacity

EPL 21221 imposes a number of compliance related conditions which relate to pollution prevention, monitoring and the implementation of best practices. The following link ([get content](#)) to EPL 21221 expands upon the above and provides all the site-specific EPL conditions.

2.4 Community Enquiries

All community enquiries must be forwarded to the Site Branch Managers. Relevant contact details, including a phone number for community enquiries, are included on signage near the site entry.

2.5 Environmental Training

It is the responsibility of the Site Branch Managers to ensure all employees and contractors are appropriately inducted and aware of their general obligations under this EMP. The Site Branch Managers will conduct monthly "toolbox talks" to ensure continuing awareness of environmental management expectations and responsibilities.

The topics to be covered during the induction and toolbox talks include:

- General site maintenance and management expectations and requirements;
- Familiarisation with site environmental controls;
- The environmental management commitments and responsibilities in this EMP (including appended management plans);
- Appropriate emergency response actions for the site (see **Sections 2.5**);
- Appropriate response and management of environmental incidents (for example, a chemical spill) in accordance with the incidents protocol in **Section 2.5**; and

- Appropriate response and management of complaints received from the public, government agencies or other stakeholders in accordance with the complaints protocol in **Section 2.6**.

Records of all training undertaken must be recorded and maintained in an Environmental Training Register to maintain consistency and for audit purposes.

2.6 Environmental Incidents

2.6.1 Objective

To ensure that any environmental incident caused by or relating to the operation of the Mainfreight warehouse is effectively responded to, and any resulting adverse environment and/or human health impact is promptly prevented or effectively managed.

For all incidents related to the operation of the Mainfreight warehouse and all related activities the reporting methods stipulated in the Protection of the Environment Operations Act 1997 (POEO Act) will be implemented to ensure all incidents are reported immediately. The POEO act is a key piece of environmental legislation in New South Wales that imposes crucial requirements for the protection of the environment. For all the details specific to the POEO Act refer to the following link [\(get content\)](#).

2.6.2 Notification Requirements

Notification responsibilities for incidents that have caused or threatened to cause material harm to the environment are detailed in section 148 of the *Protection of the Environment Operations Act 1997* (POEO Act). In summary, these are broadly categorised as:

Duty of an employee or any person undertaking an activity

Any person engaged as an employee or undertaking an activity must, immediately after becoming aware of any potential incident (even if outside of normal business hours), notify the Site Branch Managers of the incident and all relevant information about it. The Site Branch Managers, or delegate, will be available 24 hours a day, seven days a week and have the authority to stop or direct works.

Duty of an employer or occupier of the premises to notify

The employer or occupier of the premises (in this case, the Site Branch Managers) on which the incident occurred, who is notified (or otherwise becomes aware of) of the incident, must immediately notify the relevant authorities about the incident and all relevant information.

Under the POEO Act, “appropriate regulatory authority” means any of the following:

- The Environment Protection Authority (EPA), except where:
 - The activity is not a scheduled activity under the POEO Act;
 - The activity is being carried out by the State or a public authority; and
 - The activity is carried out by an authorised network operator (within the meaning of the *Electricity Network Assets (Authorised Transmissions) Act 2015*).
- If the EPA is not the appropriate regulatory authority a public authority declared under Clause 84 of the POEO Regulation is the local authority for the area in which the pollution incident occurs. For this development Liverpool City Council is the relevant public authority, as it is not a scheduled activity or being carried out by a public authority. Other appropriate public authorities include:
 - NSW Health;
 - SafeWork NSW; and
 - Fire and Rescue NSW.

Table 4 lists the contact details for these authorities. The person reporting the pollution incident must provide the following key details:

- Location of the pollution incident/emergency;
- Nature of the pollution incident/emergency;
- Their name and contact details; and
- Details of any required assistance.

Table 4 Regulatory Authority Contact Details for Environmental Incidents

Regulatory Authority / Stakeholders	Key Contact	Contact Details	
Department of Planning, Infrastructure and Housing (DPHI)	Compliance Unit	1300 305 695	
Environment Protection Authority (EPA)	Environment Line	131 555 info@environment.nsw.gov.au	
	Head Office (Sydney)	02 9995 5000	
Liverpool City Council	Main Switchboard	1300 36 2170 lcc@liverpool.nsw.gov.au	
Water NSW	Main switchboard	1300 662 077 Customer.Helpdesk@waternsw.com.au	
	Incident Notification Number – 24hours	1800 061 069	
NSW Public Health Unit	Liverpool Public Health Unit	Business Hours (02) 9794 0838 After hours (02) 8738 3000 (Liverpool Hospital)	
SafeWork NSW	Incident Notification Hotline	131 050 Select Option 3 to report a “Serious Incident or Fatality” – this will result in the incident being recorded and the appropriate person being contacted.	
Emergency Services	NSW Police NSW Fire and Rescue NSW Ambulance Service	131 444 1300 729 579	In case of emergency - 000

In accordance with condition D3 and D4 of SSD 5746 and EPL 21221, Mainfreight will immediately (or as soon as practical thereafter) notify the DPHI and other relevant agencies of an incident that causes (or may cause) material harm to the environment. The user or the Site Branch Managers are also required to provide the DPHI and any relevant agencies a detailed report on the incident within 7 days of the incident.

2.6.3 Handling Procedure

Upon becoming aware of an environmental incident, the procedure outlined below must be followed.

1. Preventative Action

Where possible and safe to do so, immediate action must be taken to prevent, stop, contain and/or minimise the environmental impact of the incident. The situation must be visually assessed and emergency response undertaken if required.

In the unlikely event that an incident requires the evacuation of the site, actions will be completed in accordance with evacuation procedures. All employees and contractors are to be made aware of the location of emergency assembly areas through site inductions, signage and regular toolbox talks.

2. Assistance

If adequate internal resources are not available and the incident threatens public health, property or the environment, it is essential that Fire and Rescue NSW be contacted by telephoning “000” for assistance.

Contacting Fire and Rescue NSW does not negate the notification requirements in **Table 4**.

3. Notify

Under the provisions of the POEO Act, there is a duty to notify any incident that has caused or threatens to cause material harm to the environment and all relevant information about the incident. The specific duties to notify are outlined above in **Section 2.5.3**.

In the event of a serious incident or emergency, it is more than likely that Fire and Rescue NSW will take control and manage the required investigation and remedial activities. Any instructions issued must be strictly adhered to.

4. Investigate

Where safe to do so, undertake immediate investigative work to determine the cause of the incident.

5. Remedial Action

Where safe to do so, undertake appropriate remedial action to address the cause of the incident or emergency and mitigate any further environmental impact. In some instances, outside resources such as specialist contractors/consultants may be required.

6. Record

It is imperative that an honest assessment of the situation is carried out and documented in order to minimise the potential for similar events in the future. On this basis, every environmental incident is to be recorded in an *Incident Report Form*. A copy of the completed report must be maintained for at least four years.

Condition D4 of Development Consent SSD 5746 requires that the DPHI and other relevant authorities be provided with a detailed report within 7 days of the incident.

7. Preventative Action

Once the incident has been suitably handled, appropriate measures must be identified and implemented to negate the possibility of re-occurrence.

2.6.4 Incidents Register

An Environmental Incidents Register is to be maintained by Mainfreight. Each register must contain the following:

- A copy of the environmental incident notification requirements and handling procedure contained in **Sections 2.5.3 and 2.5.4**;
- Site evacuation procedures;
- A separate reference sheet containing the contact details for the Site Branch Managers and the contact details of the regulatory authorities listed above in **Table 4**;
- Blank hard copies of an Incident Report Form; and
- Copies of all completed Incident Report Forms, which are to be maintained on-site for at least four years after the event to which they relate.

2.7 Environmental Complaints

2.7.1 Objective

To ensure that all environmental complaints in relation to the operation of Mainfreight are promptly and effectively received, handled and addressed.

2.7.2 Responsibility

The Site Branch Managers are responsible for ensuring that the appropriate management response and handling procedures are instigated and carried through in the event of an environmental complaint. The induction and toolbox talks outlined in **Section 2.4** must be used to ensure all site employees and contractors are aware of and understand their obligations for complaint response.

All employees and contractors who take receipt of a complaint, either verbal or written, are to immediately notify the Site Branch Managers.

2.7.3 Handling Procedure

Upon becoming aware of a complaint, the protocol outlined below must be followed.

1. Receive

In the normal course of events, the first contact for complaints will usually be made in person or by telephone. This will prompt an investigation into the complaint and a formal written complaint must be requested.

Where the initial contact reaches an employee/contractor who is not a representative of the Site Branch Managers, the call must be directed to the Site Branch Managers. If unavailable, the complainant's details must be taken with a view of returning the contact once the Site Branch Managers is in a position to discuss the matter. The complainant's name, address and contact details, along with the nature of the complaint, must be requested. If the complainant refuses to supply the requested information, a note must be made on the form and complainant advised of this.

2. Investigate

A field investigation must be initiated in an attempt to establish the legitimacy of the complaint and the cause of the problem. The Site Branch Managers must be consulted to identify any abnormality or incident that may have resulted in the complaint. Any monitoring information and/or records at and around the time of the complaint must be reviewed for any abnormality or incident that may have resulted in the complaint.

If the complaint is due to an incident, the notification requirements and handling procedures outlined in **Section 2.5** must be followed.

3. Remedial Action

Once the legitimacy and cause of the complaint has been established, every possible effort must be made to undertake appropriate remedial action(s) to fix the cause of the complaint and mitigate any further impact.

4. Inform

The investigative work and remedial action must be reported back to the complainant and, if necessary, the relevant authorities.

5. Record

It is imperative that an honest assessment of the situation is carried out and documented in order to minimise the potential for similar complaints in the future. On this basis, every complaint received is to be recorded in the *Environmental Complaint Report Form*. A copy of the completed form must be maintained for at least four years.

6. Preventative Action

Once the complaint has been suitably handled, appropriate measures must be identified and implemented to negate the possibility of re-occurrence.

2.7.4 Complaints Register

An Environmental Complaints Register is to be maintained by Mainfreight. Each register must contain the following:

- A copy of the environmental complaint handling procedure contained in **Section 2.6.3**;
- A separate reference sheet containing the contact details for the Site Branch Managers;
- Blank hard copies of the *Environmental Complaint Report Form*; and
- Copies of all completed *Environment Complaint Report Forms*, which are to be maintained on-site for at least four years after the event to which they relate.

2.8 Dispute Resolution

In accordance with condition B18 of SSD 5746, in the event of any dispute between the Mainfreight and Council or a public authority, in relation to an applicable requirement in the consent or relevant matter relating to the Development, either party may refer the matter to the Secretary for resolution. The Secretary's determination of any such dispute must be final and binding on the parties.

In the case of a dispute between Mainfreight and a community member/complainant, either party may refer the matter to the DPIE and/or relevant regulatory authority for consideration, advice, and/or negotiation. If the matter escalates, a third party mediator may be required.

2.9 Compliance Register

A compliance register will be maintained and will be made readily accessible for all staff and contractors to ensure compliance with the applicable statutory approvals. The register will be reviewed regularly.

3 Environmental Aspects

The potentially significant environmental impacts, which could eventuate during the operation of the facility, have been identified and are as follows.

Table 5 Environmental Aspects and Impacts

Activity	Aspect	Potential Impact
Transportation	• Transport of materials • Vehicle movements • Plant and equipment	• Release of exhaust emissions and generation of wheel-generated dust • Release of greenhouse gases • Noise emission • Potential for spills and leaks leading to land contamination • Use of natural resources
Warehousing / Building Operations	• Movement of goods • Storage of goods • Plant and equipment • Energy use for lighting, air conditioning, heating, pumps etc. • Water use • Waste generation	• Release of exhaust fumes and potentially smoke • Release of greenhouse gases • Noise emission • Potential for spills and leaks leading to land contamination • Potential for release of volatile solvent emissions to air • Use of natural resources • Waste generation
Building and Garden Maintenance	• Water use • Garden maintenance activities such as lawn mowing • Repainting of surfaces • General cleaning • Waste generation	• Release of exhaust fumes and potentially smoke • Noise emission • Potential for spills and leaks leading to land contamination • Pollution of waterways due to chemicals • Use of natural resources • Green waste / general waste generation
Waste Disposal and Recycling	• Storage of waste materials • Recycling/reuse of materials • Disposal of waste materials • Hazardous materials removal and disposal	• Odorous emissions to air • Potential for spills and leaks leading to land contamination • Conservation of natural resources • Use of landfill resources and pollution to land and waterways

Mainfreight will implement a range of environmental control measures suitable for mitigating the above potential impacts (see **Section 4**).

4 Environmental Management Controls

As per Schedule C of SSD 5746, the following documents apply to this EMP:

- *Bushfire Protection Assessment* prepared by Australian Bushfire Planners Pty Ltd (January 2013) as per Schedule C, Condition 7 (see **Appendix C**).
- *Traffic Management Plan* prepared by TRAFFIX (August 2013) as per Schedule C, Condition 17.
- *Noise Management Plan* prepared by SLR (December 2018) as per Schedule C, Condition 31 (see **Appendix D**).
- *Energy Efficiency and Greenhouse Gas Reduction Management Plan* prepared by SLR (December 2018) as per Schedule C, Condition 34 (see **Appendix E**).
- *Waste Management Plan* prepared by SLR (December 2018) as per Schedule C, Condition 37 (see **Appendix F**).

The environmental issues identified as requiring planning and control measures during the operational phase of the Development have been sourced from the above reports/plans as well as other relevant documentation such as industry best practice guidelines. Spills management and bunding measures, rainwater reuse, indoor air quality, and air quality are also detailed as per SSD 5746.

Table 6 Environmental Controls

Environmental Issues	Control Measures
Emergency Plan and Hazard Audit	• The Emergency Plan will be available to all staff with signage denoting emergency meeting points. • A hazard audit will be undertaken within 12 months of commencement of operations and every 3 years after that.
Traffic Management	The traffic impact is a result of the need to deliver materials, equipment and personnel to the site. The following measures will be implemented for traffic management purposes: • Truck queuing and unnecessary trips will be minimised through logistical planning of materials delivery and work practices. • Heavy vehicles and bins associated with the facility will not be parked or left on local roads or footpaths in the vicinity of the site. • All vehicles will be wholly contained on site before being required to stop. • All vehicles will enter and exit the site in a forward direction. • All loading and unloading of materials will be carried out on site. • All loading areas and turning areas in the car park are to be kept clear of any obstacles at all times. • Sustainable travel modes such as public transport, cycling and walking will be actively promoted by Mainfreight to minimise the generation of vehicle related emissions (i.e. through an incentive scheme, provision of bike racks, showers etc.).
Energy Efficiency	Effective energy (fuel and electricity use) management processes will reduce Development costs and improve environmental outcomes by minimising unnecessary energy wastage. SLR has identified the followings energy efficiency measures to be implemented by Mainfreight: • T5 Fluorescent light in the office area. • Motion control with programmable time clock for office and amenities lighting. • Building fabric complying with BCA Section J for the offices which decreases the heat gain and loss through the office areas and therefore decreases the loads on the air-conditioning systems.

Environmental Issues	Control Measures
	• 10% translucent sheets to the roof of the warehouse will help decrease the use of artificial lighting during day time. • Energy efficient T5 fluorescent lighting inside the warehouse controlled by daylight sensors. • Three of the proposed air-conditioning systems have a Coefficient of Performance (COP)/ Energy Efficiency Ratio (EER) of more than 3.0 and one has a COP of 2.8. • R1.5 roof insulation to the metal deck roof and full height precast concrete walls to the warehouse. • Light and power and mechanical equipment is also required to have its own meter. • Louvres are located on the southern walls of the warehouse and roller doors which are generally open during operation hours are located on the northern walls, allowing for natural cross ventilation throughout the warehouse. SLR recommends the following energy efficiency measures to improve the energy of the warehouse: • Light coloured roof to reflect the daylight and keep the warehouse at a comfortable temperature. • The warehouse lighting should be properly zoned and lights close to the skylights should be in separate zones to other lights. • High energy star rating kitchen appliances and office equipment should be selected. • The staff should be educated to switch off their computers overnight.
Water Management	• Rainwater will be collected on site for reuse onsite as per Schedule C Condition 25 of SSD 5746. • A wash out area will be designated for the cleaning of equipment. • Refuelling of vehicles and plant will not be carried out in areas which may discharge to the stormwater drainage system. • Any oil-contaminated stormwater is to be removed by a licensed waste oil recycler. • All chemical containers and paint tins will be disposed of appropriately. • Residual liquids will not be washed down the drain.
Noise and Vibration Control	The Site will be operated in accordance with the conditions outlined in the Development Consent and in line with best management practices, including: Operating Conditions • Truck movements between 10:00 pm and 5:00 am will be restricted to a maximum of 40 (entering or exiting). • All plant and equipment operated on the Site will be maintained in a proper and efficient condition and operated in a proper and efficient manner. • Trucks will not use the western most access driveway on Yarrowa Street between 7:00 pm and 5:00 am. • The Site is permitted to operate 24 hours per day, Monday to Sunday (inclusive). • Best management practices including reasonable and feasible noise management and mitigation measures will be implemented to minimise operational noise, low frequency noise and traffic noise generated by the Site. • Where practicable, all roller doors will be closed during the night-time period. • Weather conditions will be monitored and where adverse conditions are experienced or predicted (such as high winds or temperature inversions), operational changes will be made to avoid or reduce noise impacts during these periods. • The effectiveness of any noise suppression equipment on plant will be maintained at all times and defective plant will not be used operationally until fully repaired. • Should non-compliance with the conditions in this NMP be observed, operations will be modified or stopped to ensure compliance.

Environmental Issues	Control Measures
	- Operational Sound Power Levels (SWLs) of container handlers will not exceed 103 dBA LAeq. The SWL of all container handlers will be measured in accordance with the monitoring requirements detailed in Section 7.3 of the NMP. - All truck drivers will be provided with regular training and instructions in minimising the noise impacts of operating their vehicles. - All trucks and delivery vehicles will switch off their engines during idle periods and loading/unloading operations, particularly during the night-time period. - No external public address systems are to be used on site. Best Management Practices - An awareness and understanding of noise issues and the use of quiet work practices will be included in site inductions for all staff, contractors and visitors to the Site. Specific mention of the following items will be included: - Site specific noise management measures to be followed. - Locations of nearby noise sensitive receivers. - The simultaneous use of multiple items of significant noise generating equipment will be avoided wherever practicable, scheduling operations so they are used separately rather than concurrently. - The use of noisy equipment will be scheduled during the daytime period, where practicable. - Siting noisy equipment behind structures that act as barriers, or at the greatest distance from noise-sensitive areas, or orienting the equipment so that noise emissions are directed away from any sensitive areas, to minimise noise emissions. - The volume of reversing and start-up alarms will be reduced to the minimum practicable level (while still complying with safety regulations) and the least intrusive alarms will be used (e.g. non-tonal where appropriate from a safety perspective). - Specify maximum allowable noise/sound levels when purchasing equipment. - Include maximum allowable noise/sound levels in tender documents and contracts. - Regularly assess noise monitoring data to determine compliance status with the relevant conditions. If a non-compliance is observed, relocate, modify and/or stop operations to ensure compliance with the relevant conditions is maintained. - Noise monitoring will include attended monitoring as well as a program to monitor the SWLs of the plant on site. - An awareness of industry developments will be maintained in relation to noise mitigation for individual plant items used on the site, in order to assess cost and practicality of plant upgrade or mitigation implementation. - Enclosure of outdoor fixed plant (such as mechanical plant) where practicable. - For equipment with enclosures, ensure doors and seals are well maintained and kept closed when not in use. - Noise attenuation of mobile equipment such as trucks, forklifts, etc., where a noise issue is identified. - Truck queuing and unnecessary trips will be minimised through logistical planning of materials delivery and work practices to minimise heavy vehicle noise emissions. - All vehicles will enter and exit the site in a forward direction to minimise noise from reversing alarms as far as practicable. - All trucks are to have mufflers, and any other noise control equipment, regularly maintained in good working order. Trucking routes will use main roads, where feasible.
Spills Management	Schedule C, Condition 21 of SSD 5746 specifies the following measures in relation to spills management: Spill kits are to be located and maintained adjacent to external trafficable areas of the premises.

Environmental Issues	Control Measures
	Additional control measures to be implemented are described below: • All liquid chemicals, fuels and oils used on-site will be stored in appropriately bunded areas in accordance with the requirement of all relevant Australian Standards, Building Code of Australia (BCA) requirements, and/or EPA's <i>Storing and Handling Liquids: Environmental Protection – Participants Handbook</i>. • All plant/equipment will be inspected daily to avoid leakage of fuel, oil or hydraulic fluid to the worksite. Machinery found to be leaking will be repaired or replaced. • A hazardous substance register is kept on site. • Where fuel, oil or other chemicals are to be stored on site, a secure, lockable and floored area will be provided before any of these substances are accepted on site. This area will be imperviously bunded with a capacity to contain not less than 110% of the volume of the largest container. • Relevant Safety Data Sheets (SDSs) are available on-site for all chemicals used or stored on site. • A container of spill absorbent will be retained within the site working area to be used for emergency spills of fuel, oil or other chemicals. • If drums of chemicals and fuels are to be used outside a bunded area, a spill kit will be readily available nearby, the drums will not be left unattended, and they will be returned to the bunded area for storage overnight. • In the event of spillage of hydrocarbon products such as fuels and/or chemicals, on-site spill containment equipment/kits will be used to contain spills and cleaned in accordance with the SDS requirements. • If an environmental incident occurs on site, an Incident Report Form will be completed and forwarded to the client.
Hazardous Substances	Further to the above, compliance with the following actions will reduce the risk of significant pollution arising from inappropriate storage and handling of hazardous materials: • Hazardous substances will be defined in accordance with the Australian Code for the Transport of Dangerous Goods. • All hazardous substances brought on site will be stored, handled and transported in a manner that meets relevant legislative requirements and minimises the risks associated with the substance. • Any refuelling of vehicles and/or other site plant will not be carried out without an operator being in attendance at all times. • Chemicals which, when mixed together (vapour or liquid), are potentially explosive or reactive will not be stored in the same location. • All hazardous substances will be stored in the original containers with the label intact at all times. • Any oil contaminated stormwater collected in the bunded fuel storage sump will be pumped out and disposed of by a licensed waste oil recycler. • The maintenance and cleaning of vehicle and site plant will not be carried out in areas from where washings may be discharged into receiving waters, street gutters or stormwater channels. • Spillages of hazardous liquids will be contained by means of a dry absorbent such as sand, saw-dust or oil absorber, which can be transferred to a suitable container for disposal by a licensed waste disposal contractor. • All contaminated material including any material contaminated by the spillage of hazardous substances will be disposed of in accordance with the following requirements: • The waste disposal contractor will hold the appropriate EPA licence.

Environmental Issues	Control Measures
	• The proposed disposal location will be an EPA registered waste disposal facility and have approval to accept the particular waste. • Each hazardous substance will be recorded in a register and relevant staff trained on the MSDS and how to use them.
Indoor Air Quality Management	• Air conditioners will be installed and operated in accordance with the <i>Public Health Act 2010</i> and regularly cleaned with filters replaced on a routine basis to ensure maintenance of indoor air quality.
Air Quality Management	The following measures will be adopted to minimise emissions to air (i.e. greenhouse gases, dust particles, fumes and odour) during operational phase of the Development: • All petrol and diesel engine vehicles and equipment (mobile and stationary) will be properly maintained and operated in accordance with manufacturer's instructions. • Environmentally friendly refrigerants will be used. • Minimise truck queuing and unnecessary trips through logistical planning of materials delivery and work practices. • Stationary trucks will switch off engines if idling time onsite is likely to exceed 2 minutes (where possible). • Ensure all hazardous and dangerous goods, including fuel and oil, paints and solvents, cleaning chemicals, are adequately stored with secure lids or bunged to prevent uncontrolled releases of volatile solvent emissions to air. • Ensure spill kits are appropriately located and stocked for prompt clean-up of potentially odorous spills. • Waste storage areas to be well maintained to prevent nuisance odours. • Low-VOC (Volatile Organic Compound) paints will be used wherever possible. • The use of electric lawn mowers will be investigated as a preference to petrol operated lawn mowers.
Waste Management	Rising landfill tipping fees together with higher transport costs have helped increase the economic viability of recycling construction wastes. Analysis of construction waste disposal costs indicates that these costs can be reduced by waste minimisation and recycling. To encourage waste minimisation and recycling and to ensure that wastes which cannot be recycled are disposed of at an appropriately licensed waste disposal facility, the following actions will be undertaken: • Waste will be managed in accordance with Table 1 of the Waste Management Plan. • If possible, waste collection will not coincide with peak operational or other delivery schedules. • The waste collection area will not interfere with operational vehicle movements. • The waste collection vehicles will enter the Development and travel in a clockwise direction, exiting the Development in a forward direction. • The waste avoidance, re-use and recycling measures listed in Section 6.4 of the Waste Management Plan will be utilised. • Signage will be displayed and will: • Be clearly visible if a roller shutter is installed on the garbage room. The sign will stipulate that the door is closed at all times when not in use, as a bin theft prevention measure. • Be clear and concise with applicable warning signs, such as "NO STANDING" and "DANGER", on external walls of the garbage room where bin collection is to be conducted. • Correctly label all garbage and recycling bins at all times. • Indicate the location of, and directions to, waste storage areas. • Identify all potential hazards or dangers associated with the waste facilities; and • Display applicable emergency contact information in case there are any issues with the waste and recycling systems or services.

Environmental Issues	Control Measures
	• The design and use of safety signs for waste rooms and enclosures should comply with Australian Standard <i>AS 1319 Safety Signs for the Occupational Environment</i>. • All maintenance chemicals, oils and fuels including associated wastes will be stored separately in an appropriately bunded, well-ventilated area with a drain grease trap and allow sufficient space for handling and storage. • Liquid, semi-liquids or moist substances will not be placed in waste containers, unless securely wrapped or contained to prevent the substance from leaking. • Any liquid wastes or dangerous goods wastes will be disposed of by a suitably qualified contractor to an appropriately licensed disposal facility. • No liquid wastes or wash down waters will be disposed of via the stormwater drainage system. • Wastewater storage tanks, including stormwater collection tanks, if applicable, will be carefully monitored to ensure overflow does not occur. • Regular condition and cleanliness inspections of bins and waste storage rooms will be undertaken. • Bin cleaning will be undertaken at least every three months or as required. • The Site Branch Managers will provide on-going education on correct source separation and waste management at least every three months. • Signage will be monitored and maintained to ensure it remains clean, clear and applicable. • Unexpected waste quantities will be managed to mitigate waste overflow in storage areas. • Bins will be monitored to ensure no overfilling occurs. Please see the <i>Waste Management Plan</i> prepared by SLR November 2018 for further details.
Bushfire / Fire Precautions	The following measures will be implemented on site: • The management of the landscaped gardens and the site will generally comply with the recommendations of Appendix A5.4 and Appendix A5.5 of <i>Planning for Bushfire Protection and Standards for Asset Protection Zones</i> (NSW RFS, 2006). • Any fires on site will be extinguished promptly. • Maintain a clear area of low cut lawn or pavement adjacent to the building. • Keep areas under shrubs and trees raked and clear of combustible fuels. • Trees and shrubs should be maintained in such a manner that tree canopies are separated by 2 metres and understorey vegetation is not continuous. • Adequate fire-fighting capacity will be maintained on site, including a reticulated water supply for potable water supply and fire hydrants extending into the site from the existing main in Yarrowa Street. Fire-fighting water supply will comply with the requirements of the BCA and AS 2419.1-2005 <i>Fire hydrant installations – System design, installation and commissioning</i> (and Amendment 2007).
Flora and Fauna Protection	• Landscaping will be maintained as per the approved Landscape Plans as per Condition 41 of the Development Consent and in consultation with the NSW Rural Fire Service (RFS). • Contact WIRES if native animals (native birds, possums etc.) are injured on site.

5 Environmental Monitoring, Auditing and Reporting

To demonstrate compliance with the EMP during the operational phase, the Site Branch Managers will conduct routine (i.e. daily) checks and inspections to ensure that the environmental controls described in this EMP have been implemented, meet specifications and are being maintained. Any actions resulting from the inspections will be promptly resolved.

The Site Branch Managers will ensure that environmental performance is evaluated on a regular basis and includes a review of inspections records, complaints/enquires received, waste generated/disposed, incidents and other environmental issues.

Table 7 outlines the monitoring and auditing requirements to be undertaken by Mainfreight.

Table 7 Environmental Monitoring Requirements

Requirements	Person Responsible	Timing / Frequency	References / Notes
Noise			
Operational noise monitoring will be conducted in accordance with the ONMP.	Tenants / Facility Managers	Annually	ONMP Section 7.2
The sound power levels of all plant and equipment will be tested with all results maintained.		Annually or in response to specific noise complaint	ONMP Section 7.3
A complaints register will be maintained by the Environmental Manager or equivalent site representative. Responses to complaints will be undertaken within 24 hours. Information recorded for all complaints will include: Date and time of complaints - Name, address and telephone number if complainant if supplied, otherwise, a note stating details not supplied - Nature of the complaints including details of the noise leading to the complaint and the time of occurrence and duration of the event - Response actions taken to date in relation to the complaint, including any follow-up contact made with the complainant. If no action was taken, the reason for the inaction shall be noted	Facility Manager / Contractors / Tenants	On-going	ONMP Section 8
Energy Efficiency			
An energy audit and management review will be undertaken on a yearly basis to ensure energy savings procedures are being followed correctly.	Facility Manager / Contractors	Annually	EE & GHG Section 6
Where audits show that energy saving procedures are not carried out effectively, additional employee training should be undertaken in conjunction with the review of signage and procedures.		Monthly	
Sub-metering of all major energy consuming processes or equipment greater than 100 kVA.		Ongoing	

Requirements	Person Responsible	Timing / Frequency	References / Notes
Waste			
Monitoring of bins and bin storage areas should be conducted every 6 months to ensure waste is being managed appropriately.	Facility Manager / Site Branch Managers	Every 6 months	WMP Section 6.8
Maintain a Waste Data File containing the WMP together with waste quantities and records such as waste receipts and/or tickets of waste disposal and recycling.	Facility Manager / Site Branch Managers	Ongoing	
The Waste Data File is also required to be available for regulatory bodies for all demolition and construction works	Facility Manager / Site Branch Managers	Ongoing	
Hazard and Risk			
Twelve months after the commencement of operations of the development and every three years thereafter, or at such intervals as the Secretary may agree, the Applicant shall carry out a comprehensive Hazard Audit of the development and within one month of each audit submit a report to the Secretary for approval.	Facility Manager / Contractors	Every 3 years	SSD 5746 Condition C5
Incident Reporting			
The applicant shall notify the Secretary and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the development as soon as practicable after the Applicant becomes aware of the	Facility Manager / Site Branch Managers	On-going	SDD 5746 Condition D3
Within 7 days of notifying the incident, the Applicant shall provide a written report to the Department and EPA that: a) describe the date, time and nature of the incident; b) identifies the cause, or likely cause, of the incident; and c) describes what action has been taken to date to address the incident and what actions are proposed to be implemented in the future to address the consequences of the incident or avoid recurrence of the incident.	Facility Manager / Site Branch Managers	On-going	SSD 5746 Condition D4

6 Record Keeping and Review

6.1 Record Keeping

A copy of all necessary licences, permits and approvals will be obtained and kept up-to-date as required throughout the life of the Development.

The following records will be maintained for record-keeping purposes taking guidance from ISO 14001:2004 *Environmental Management Systems – Requirements with guidance for use*:

- The EMP (all versions).
- Employee training and induction records.
- Site inspection reports.
- Records of hazardous materials – removal and disposal (where required).
- Waste receipts and dockets.
- Environmental monitoring records.
- Monitoring equipment calibration reports.
- Environmental incidents/emergencies reports.
- Non-conformance reports.
- Complaint Reports.
- Incident Report Forms.
- Audit reports.
- Management Review Minutes.
- Regulatory authority inspection reports and correspondence with regulatory authorities.

6.2 Review Process

This EMP will be reviewed, and if necessary, updated within three months of the following:

- Incident report under Condition D4 of SSD 5746;
- Annual review Condition D5 of SSD 5746;
- Any modifications to this consent

APPENDIX A

Development Consent SSD 5746 and Mod 1

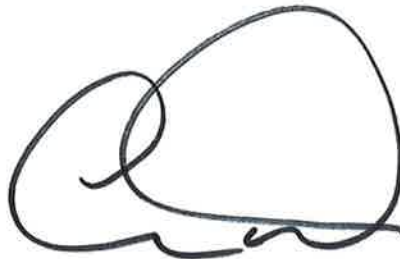
Development Consent

Section 89E of the *Environmental Planning and Assessment Act 1979*

As delegate of the Minister for Planning and Infrastructure under delegation executed on 27 February 2013, I approve the development application referred to in Schedule A, subject to the conditions in Schedules B to D.

These conditions are required to:

- prevent, minimise, and/or offset adverse environmental impacts including economic and social impacts;
- set standards and performance measures for acceptable environmental performance;
- require regular monitoring and reporting; and
- provide for the ongoing environmental management of the development.



**Executive Director
Development Assessment Systems & Approvals**

Sydney

9 AUGUST 2013

SCHEDULE A

Application No.:	SSD-13_5746
Applicant:	Goodman Property Services (Aust) Pty Ltd
Consent Authority:	Minister for Planning and Infrastructure
Land:	30-50 Yarrowa Street, Prestons Lot 101 in DP 1117691, Lot 102 in DP 1117691 and Lot 2 in DP 28729
Development:	Expansion of the Mainfreight storage and distribution centre

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DEFINITIONS

Applicant	Goodman Property Services (Australia) Pty Ltd, or any other person or persons who rely on this consent to carry out the development that is subject to this consent
BCA	Building Code of Australia
Council	Liverpool City Council
Dangerous Goods	As defined by the Australian Dangerous Goods Code 7 th Edition (Australian Government, 2010)
Day	The period from 7am to 6pm on Monday to Saturday, and 8am to 6pm on Sundays and Public Holidays
Department	Department of Planning and Infrastructure
Development	The development as described in the EIS and RTS for the expansion of the existing Mainfreight storage and distribution centre. The expansion includes: • a 14,960m² expansion to the existing warehouse buildings, including a 1,570m² area for the storage of dangerous goods; • a 2,350m² extension of the existing breezeway between Building 1 and Building 2; • a hardstand area of approximately 16,835m² to be used for manoeuvring and parking; • relocation of the existing truck wash facility; • new access driveways for cars and trucks; and • other ancillary development on the site.
Director-General	Director-General of the Department of Planning and Infrastructure, or nominee
EIS	Environmental Impact Statement titled " <i>Proposed Expansion of Existing Mainfreight Facility including Storage of Dangerous Goods (Chemical Storage Facility)</i> " and accompanying appendices, dated April 2013 and prepared by McKenzie Group Consulting on behalf of Goodman Property Services (Aust) Pty Ltd
EPA	Environment Protection Authority
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2000</i>
EPL	Environment Protection Licence
Evening	The period from 6pm to 10pm
Feasible	Feasible relates to engineering considerations and what is practical to build
Heavy vehicle	Any vehicle with a gross vehicle mass of 5 tonnes or more
Minister	Minister for Planning and Infrastructure, or delegate
Night	The period from 10pm to 7am on Monday to Saturday, and 10pm to 8am on Sundays and Public Holidays
NSW RFS	NSW Rural Fire Service
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
Reasonable	Reasonable relates to the application of judgement in arriving at a decision, taking into account: mitigation benefits, cost of mitigation versus benefits provided, community views and the nature and extent of potential improvements
RMS	Roads and Maritime Services
RTS	Response to Submissions Report titled " <i>Response to Submissions - State Significant Development SSD-5746</i> ", prepared by McKenzie Group Consulting on behalf of Goodman Property Services (Aust) Pty Ltd and dated July 2013
Site	The land referred to in Schedule 1 and shown in Appendix 1
SOCs	The development's statement of commitments for the development in Appendix 4
TransGrid's Submission	Submission from TransGrid dated 17 June 2013, including Annexures A-P

SCHEDULE B

ADMINISTRATIVE CONDITIONS

OBLIGATION TO MINIMISE HARM TO THE ENVIRONMENT

- B1. The Applicant shall implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the development.

TERMS OF CONSENT

- B2. The Applicant shall carry out the development generally in accordance with the:
- (a) EIS;
 - (b) RTS;
 - (c) plans and elevations (see Appendix 1);
 - (d) statement of commitments (Appendix 2); and
 - (e) conditions of this consent.
- B3. If there is any inconsistency between the above documents, the most recent document shall prevail to the extent of the inconsistency. However, the conditions of this consent shall prevail to the extent of any inconsistency.
- B4. The Applicant shall comply with any reasonable requirement/s of the Director-General arising from the Department's assessment of:
- (a) any reports, plans, strategies, programs or correspondence that are submitted in accordance with this consent; and
 - (b) the implementation of any actions or measures contained in these reports, plans, strategies, programs or correspondence.

LIMITS OF CONSENT

- B5. The Applicant must ensure that the total area of:
- (a) Warehouse Building 1 ('Transport Shed') and Warehouse Building 2 ('Logistics Shed') does not exceed 43,044m²;
 - (b) the dangerous goods area does not exceed 1,570m²; and
 - (c) the breezeway does not exceed 5,822m².
- B6. The storage of dangerous goods on site shall not exceed the quantities provided in Table 1 at any one time.

Table 1: Dangerous Goods Storage

Hazardous Material	Dangerous Goods Class	Approximate Operating Quantity (kg)	Total Store Capacity (kg)
Aerosols*	2.1	347,260	380,000
Flammable and Combustible Liquids	3	83,820	88,660
Oxidising Agents	5.1	63,698	78,500
Corrosive Substances	8	1,165	1,500
Miscellaneous Dangerous Goods	9	4,249	4,620

Note: These quantities are for the total combined weight of packaging and content as described in the Preliminary Hazard Analysis.

LAPSING OF CONSENT

- B7. This consent shall lapse five (5) years from the date of this consent unless the works associated with the development have physically commenced.

SURRENDER OF EXISTING DEVELOPMENT CONSENTS

- B8. By the end of July 2014, or as otherwise agreed by the Director-General, the Applicant shall surrender all existing development consents for the site including DA-1064/2006, DA-1065/2006, DA 1672/2006, DA-1093/2007, DA-153/2008, DA-153/2008/A and DA-1636/2012 in accordance with Clause 97 of the EP&A Regulation.

DEMOLITION

- B9. The Applicant shall ensure that all demolition work is carried out in accordance with *Australian Standard AS 2601:2001: The Demolition of Structures*, or its latest version.

STRUCTURAL ADEQUACY

- B10. The Applicant shall ensure that all new buildings and structures, and any alterations or additions to existing buildings and structures are constructed in accordance with the relevant requirements of the BCA.

Notes:

- Under Part 4A of the EP&A Act, the Applicant is required to obtain construction and occupation certificates for the proposed building works.
- Part 8 of the EP&A Regulation sets out the requirements for the certification of the development.

STATUTORY REQUIREMENTS

- B11. The Applicant shall ensure that all necessary licences, permits and approvals are obtained and kept up-to-date as required throughout the life of the development. No condition of this consent removes the obligation for the Applicant to obtain, renew or comply with such licences, permits or approvals.

OPERATION OF PLANT AND EQUIPMENT

- B12. The Applicant shall ensure that all plant and equipment used for the development is:
- (a) maintained in a proper and efficient condition; and
 - (b) operated in a proper and efficient manner.

PROTECTION OF PUBLIC INFRASTRUCTURE

- B13. Prior to the commencement of construction, the Applicant shall:
- (a) prepare a dilapidation report of the public infrastructure in the vicinity of the site (including roads, gutters and footpaths); and
 - (b) submit a copy of this report to the Director-General and Council.

The Applicant shall:

- (a) repair, or pay the full costs associated with repairing, any public infrastructure that is damaged by the development; and
- (b) relocate, or pay the full costs associated with relocating, any public infrastructure that needs to be relocated as a result of the development.

UTILITIES

- B14. Prior to the construction of any utility works associated with the development, the Applicant shall obtain relevant approvals from service providers.
- B15. Prior to occupation of the development, the Applicant shall obtain a compliance certificate for water and sewerage infrastructure servicing of the site under Section 73 of the *Sydney Water Act 1994* from Sydney Water Corporation.

STAGED SUBMISSION OF PLANS OR PROGRAMS

- B16. With the approval of the Director-General, the Applicant may:
- (a) submit any strategy, plan or program required by this consent on a progressive basis; and/or
 - (b) combine any strategy, plan or program required by this consent.

Notes:

- If the submission of any strategy, plan or program is to be staged, then the relevant strategy, plan or program shall clearly describe the specific stage to which the strategy, plan or program applies, the relationship of this stage to any future stages and the trigger for updating the strategy, plan or program.
- There must be a clear relationship between the strategy, plan or program that are to be combined.

DEVELOPMENT CONTRIBUTION

- B17. Prior to commencement of operation of the development, the Applicant shall pay contributions to a maximum amount of \$863,812.00 in accordance with Council's *Liverpool Contributions Plan 2009*, dated December 2010, in consultation with Council, and to the satisfaction of the Director-General.

Note: This contribution is subject to indexation to reflect quarterly variations in the Consumer Price Index All Group Index Number for Sydney, as published by the Australian Bureau of Statistics.

DISPUTE RESOLUTION

- B18. In the event that a dispute arises between the Applicant and Council or a public authority other than the Department, in relation to a specification or requirement applicable under this consent, the matter must be referred by either party to the Director-General, or if not resolved, to the Minister, whose determination of the dispute shall be final and binding to all parties. For the purpose of this condition, 'public authority' has the same meaning as provided under Section 4 of the Act.

SCHEDULE C

ENVIRONMENTAL PERFORMANCE CONDITIONS

HAZARDS AND RISK

Pre-construction

C1. At least one month prior to the commencement of construction of the development (except for construction of those preliminary works that are outside the scope of the hazard studies), or within such further period as the Director-General may agree, the Applicant shall prepare and submit for the approval of the Director-General the studies set out under subsections (a) to (b) (the pre-construction studies). Construction, other than of preliminary works, shall not commence until approval has been given by the Director-General and, with respect to the Fire Safety Study, approval has also been given by the Commissioner of the NSW Fire Brigades.

(a) Fire Safety Study

A Fire Safety Study for development. This study shall cover the relevant aspects of the Department of Planning's Hazardous Industry Planning Advisory Paper No. 2, 'Fire Safety Study Guidelines' and the New South Wales Government's 'Best Practice Guidelines for Contaminated Water Retention and Treatment Systems'. The study shall also be submitted for approval, to the NSW Fire Brigades.

(b) Final Hazard Analysis

A Final Hazard Analysis of the development prepared in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 6, 'Guidelines for Hazard Analysis'.

Note: For the purposes of Condition C1, 'Preliminary works' includes the construction, fit out and use of the expanded facility, but excludes the use of the dangerous goods area, which is not permitted to be used until the relevant approvals from the Director-General and the Commissioner of the NSW Fire Brigades have been obtained.

Pre-commissioning

C2. The Applicant shall develop and implement the plans and systems set out under subsections (a) to (b). No later than two months prior to the commencement of commissioning of the development, or within such further period as the Director-General may agree, the Applicant shall submit for the approval of the Director-General documentation describing those plans and systems. Commissioning shall not commence until approval has been given by the Director-General.

(a) Emergency Plan

The company's Emergency Plan and detailed emergency procedures shall be updated to incorporate any changes due to the development. The plan shall include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The plan shall be in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 1, 'Industry Emergency Planning Guidelines'.

(b) Safety Management System

The company's Safety Management System shall be updated to include any changes due to the development. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records shall be kept on-site and shall be available for inspection by the Director-General upon request. The Safety Management System shall be developed in accordance with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 9, 'Safety Management'.

Pre-startup

C3. Pre-Startup Compliance Report

One month prior to the commencement of operation of the development, the Applicant shall submit to the Director-General, a report detailing compliance with Conditions C1 and C2, including:

- (a) dates of study/plan/system submission, approval, commencement of construction and commissioning;
- (b) actions taken or proposed, to implement recommendations made in the studies/plans/systems; and
- (c) responses to each requirement imposed by the Director-General under Condition C6.

Post-startup

C4. Post-Startup Compliance Report

Three months after the commencement of operation of the development, the Applicant shall submit to the Director-General, a report verifying that:

- (a) the Emergency Plan required under Condition C2(a) is effectively in place and that at least one emergency exercise has been conducted; and
- (b) the Safety Management System required under Condition C2(b) has been fully implemented and that records required by the system are being kept.

Ongoing

C5. Hazard Audit

Twelve months after the commencement of operations of the development and every three years thereafter, or at such intervals as the Director-General may agree, the Applicant shall carry out a comprehensive Hazard Audit of the development and within one month of each audit submit a report to the Director-General for approval.

The audits shall be carried out at the Applicant's expense by a qualified person or team, independent of the development, approved by the Director-General prior to commencement of each audit. Hazard Audits shall be consistent with the Department of Planning's Hazardous Industry Planning Advisory Paper No. 5, 'Hazard Audit Guidelines'.

The audit report must be accompanied by a program for the implementation of all recommendations made in the audit report. If the Applicant intends to defer the implementation of a recommendation, reasons must be documented.

C6. Further Requirements

The Applicant shall comply with all reasonable requirements of the Director-General in respect of the implementation of any measures arising from the reports submitted in respect of Conditions C1 to C5 inclusive, within such time as the Director-General may agree.

Bushfire Management

C7. The Applicant shall manage the site in accordance with the Bushfire Protection Assessment report prepared by Australian Bushfire Planners Pty Ltd and dated 12 January 2013 (B121914), Planning for Bush Fire Protection (NSW RFS, 2006) and Standards for Asset Protection Zones (NSW RFS, 2006) in consultation with the NSW RFS to the satisfaction of the Director-General. The management measures to be implemented on the site shall be set out in the Environmental Management Plan (see Condition D1).

C8. Within 12 months of commencement of construction, the Applicant shall make suitable arrangements to ensure that the area of the site identified as Bush Fire Prone Land Vegetation Buffer on Liverpool Bush Fire Prone Land Map is managed in perpetuity as an Inner Protection Zone in accordance with the Bushfire Protection Assessment report prepared by Australian Bushfire Planners Pty Ltd and dated 12 January 2013 (B121914), Planning for Bush Fire Protection (NSW RFS, 2006) and Standards for Asset Protection Zones (NSW RFS, 2006) in consultation with the NSW RFS to the satisfaction of the Director-General.

C9. The Applicant shall:

- (a) implement suitable measures to minimise the risk of fire on site;
- (b) extinguish any fires on site promptly; and
- (c) maintain adequate fire-fighting capacity on site, including water supply in accordance with the requirements of the BCA and AS 2419.1, 2005.

TRAFFIC AND ACCESS

Operating Conditions

C10. The Applicant shall ensure that:

- (a) internal roads, driveways and parking (including grades, turn paths, sight distance requirements, aisle widths, aisle lengths and parking bay dimensions) associated with the development are constructed and maintained in accordance with the relevant standards and the latest versions of AS 2890.1, AS 2890.2 and AS/NZS 2890.6;
- (b) the swept path of the longest vehicle (to service the site) entering and exiting the subject site, as well as manoeuvrability through the site, must be in accordance with AUSTROADS.
- (c) the development does not result in any vehicles queuing on the public road network;
- (d) heavy vehicles and bins associated with the development do not park or stand on local roads or footpaths in the vicinity of the site;
- (e) all vehicles are wholly contained on site before being required to stop;
- (f) all vehicles enter and exit the site in a forward direction;
- (g) all loading and unloading of materials is carried out on site; and
- (h) the proposed loading areas and turning areas in the car park are kept clear of any obstacles, including parked vehicles, at all times.

Parking Provision

C11. The Applicant shall provide a minimum of 177 on-site car parking spaces and 70 truck parking spaces for use during operation of the development.

- C12. The Applicant shall reserve an additional undeveloped area for 40 overflow car parking spaces on the site. The additional 40 spaces shall be provided if required, or at the Director-General's request, in accordance with the EIS.
- C13. The Applicant shall provide parking for bicycles and associated facilities such as change rooms.

Off-Site Parking Restrictions

- C14. Prior to commencement of operations, the Applicant must line mark and provide "No Parking" signage along Yarrowa Street from its intersection with Bernera Road to the western extent of the development site to the satisfaction of Council.

Vehicular Footpath Crossings

- C15. The three (3) proposed concrete vehicular crossings over Council's footpath/pedestrian way must be constructed to Council's satisfaction.
- C16. The existing driveway and layback located at the eastern side of the existing development must be reinstated with kerb, gutter and turf to Council's satisfaction.

Traffic Management Plan

- C17. Prior to commencement of construction, the Applicant shall prepare and implement a Traffic Management Plan (TMP) for the development in consultation with Council, to the satisfaction of the Director-General. The Plan shall at minimum:
- (a) be prepared by a suitably qualified and experienced expert;
 - (b) detail the number and frequency of truck movements, size of trucks, vehicle routes, hours of construction and operation;
 - (c) provide the estimated duration and staging of construction works;
 - (d) detail the access and parking arrangements for construction and operational vehicles during both construction and operations to ensure road and site safety, and demonstrate that there will be no queuing on Yarrowa Road;
 - (e) include a Truck Operational Management Plan (TOMP) that will ensure that the proposed stacked truck parking is managed in an orderly manner.
 - (f) include a Driver Code of Conduct that details traffic management measures to be implemented during construction and operations to:
 - (i) minimise impacts of the development on the local and regional road network;
 - (ii) minimise conflicts with other road users; and
 - (iii) ensure truck drivers use those routes specified.

SOIL AND WATER

Erosion and Sediment Control

- C18. During construction works, the Applicant shall implement suitable erosion and sediment control measures on-site, in accordance with the relevant requirements in the latest version of the *Managing Urban Stormwater: Soils and Construction Guideline*.

Pollution of Waters

- C19. The Applicant shall comply with Section 120 of the POEO Act, except as may be expressly permitted by a licence under the POEO Act.

Bunding

- C20. The Applicant shall store all liquid chemicals, fuels and oils used on-site in appropriately banded areas in accordance with the requirements of all relevant Australian Standards, and/or EPA's *Storing and Handling Liquids: Environmental Protection – Participants Handbook*.

Spill Management

- C21. The Applicant shall ensure that the following requirements are complied with at all times to prevent and manage spills and leaks entering the stormwater system:
- (a) the isolation valves located in the stormwater system are to be clearly labelled;
 - (b) a Maintenance/Service Plan is to be put in place to ensure that the stormwater isolation valves are maintained in a serviceable condition;
 - (c) all external stormwater drains are to be clearly identified as stormwater drains;
 - (d) spill kits are to be located and maintained adjacent to external trafficable areas of the premises; and
 - (e) the breezeway is to be fully isolated from the stormwater system at all times.

Stormwater Management

- C22. The stormwater management system shall be designed, constructed and operated in accordance with the Civil Engineering Report (including plans) prepared by Costin Roe dated 21 May 2013, Revision C, and to the satisfaction of Council and the EPA.
- C23. The Applicant shall provide and maintain easements for stormwater and overland flow paths from DP 28729 Lots 10 and 11 to the south of the site, as identified in the Civil Engineering Report (including plans) prepared by Costin Roe dated 21 May 2013, Revision C, to the satisfaction of Council.
- C24. All costs associated with the preparation and registration of any covenant or restriction on title, whether directly or indirectly, will be borne solely by the Applicant.

Rainwater Reuse

- C25. The Applicant shall submit detailed designs for the rainwater reuse system to Council for approval prior to the commencement of construction.

Trade Waste

- C26. The Applicant must secure a trade waste agreement with the Sydney Water Corporation prior to the discharge of any water to sewer.

NOISE

Construction and Operational Hours

- C27. The development shall comply with the construction and operational hours in Table 2 for the site, unless otherwise agreed in writing by the EPA.

Table 2: Operating Hours

Activity	Day	Hours
Construction	Monday – Friday	7am to 6pm
	Saturday	8am to 1pm
	Sunday & Public Holidays	No Construction
Operations	Monday - Sunday	24 hours (Truck movements restricted to between 5am and 7pm)

Construction Noise Criteria

- C28. The development shall be constructed with the aim of achieving the construction noise management levels detailed in the Interim Construction Noise Guideline (Department of Environment and Climate Change, 2009) and summarised in Table 3.

Table 3: Noise impact assessment criteria dB(A)

Location	Noise
	L _{Aeq} (15 minute)
Any private residential receiver (on land zoned for residential use)	47
Any Industrial Property (or residential property on land zoned for industrial use)	75

Note: Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

Operational Noise Criteria

- C29. The development shall ensure that the noise generated by the development does not exceed the criteria in Table 4 at any private residential receiver.

Table 4: Noise impact assessment criteria dB(A)

Location	L _{Aeq} (15 minute) (Day, Evening, Night)	L _{A1, 1min} Night Time (Sleep Disturbance)
22 Michelago Circuit, Prestons	37	45
23 Coffs Harbour Ave, Hoxton Park	39	45

Notes:

- Noise generated by the development is to be measured in accordance with the relevant procedures and exemptions (including certain meteorological conditions) of the NSW Industrial Noise Policy.

Operating Conditions

C30. The Applicant shall:

- implement best management practice, including all reasonable and feasible noise management and mitigation measures to prevent and minimise construction, operational, low frequency and traffic noise generated by the development;
- where practicable, keep all roller doors closed during the night time period;
- minimise the noise impacts of the development during adverse meteorological conditions when noise criteria do not apply;
- maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired; and
- modify and/or stop operations to ensure compliance with the relevant conditions of this consent.

Noise Management Plan

C31. The Proponent shall prepare and implement a Noise Management Plan for the development in consultation with the EPA and to the satisfaction of the Director-General. The plan must:

- be prepared and implemented by a suitably qualified and experienced person whose appointment has been approved by the Director-General;
- be submitted for approval by the Director-General prior to commencement of construction;
- describe the measures that will be implemented to minimise noise from the construction and operation of the project including:
 - best management practice is being employed on site;
 - traffic management noise is effectively managed; and
 - the noise impacts of the project are minimised during any meteorological conditions when the noise criteria in this approval do not apply;
 - compliance with the relevant conditions of this approval.
- describe the noise management system;
- includes a noise monitoring program that:
 - is capable of evaluating the performance of the project;
 - includes a protocol for determining exceedances of the relevant conditions of this approval and responding to complaints;
 - adequately supports the noise management system; and
 - evaluates and reports on the effectiveness of the noise management system.

AIR QUALITY

Discharge Limits

C32. The Applicant shall ensure that the development does not cause or permit the emission of any offensive odour (as defined in the POEO Act).

Air Quality Discharges

C33. The Applicant shall:

- implement all reasonable and feasible mitigation measures to prevent and minimise dust and odour emissions from the development;
- minimise any visible off-site air pollution that occurs as a result of this development; and
- minimise surface disturbance within the site, other than as permitted under this consent.

Energy Efficiency

C34. The Applicant shall prepare and implement an Energy Efficiency Program for the development, to the satisfaction of the Director-General. The program must:

- be approved by the Director-General prior to commencement of construction;

- (b) compare the proposed energy usage of the development to other existing Australian warehouse centres, and set benchmarks for industry best practice;
- (c) investigate reasonable and feasible energy efficiency measures available;
- (d) describe the measures that would be implemented onsite, demonstrating the use of best available technology; and
- (e) include a program to monitor and report annually on the efficiency of the measures implemented and ensure the development will continue to operate at industry best practice over time.

Air Conditioners

C35. The Applicant shall design, install and operate all air and water heating and cooling systems in accordance with the *Public Health Act 1991* and to the satisfaction of Council.

WASTE MANAGEMENT

C36. The Applicant shall ensure that all waste generated during the Construction and Operation of the development is stored, handled and disposed of in accordance with the EPA's *Waste Classification Guidelines* and disposed of to a facility that may lawfully accept the waste.

Waste Management

C37. The Proponent shall prepare and implement a Waste Management Plan for the development to the satisfaction of the Director-General. This Plan shall:

- (a) be prepared in consultation with the EPA by a suitably qualified and experienced expert whose
- (b) appointment has been endorsed by the Director-General;
- (c) be approved by the Director-General prior to the commencement of operations;
- (d) detail the type and quantity of waste to be generated by the operation of the development;
- (e) detail the materials to be reused or recycled, either on or off-site; and
- (f) detail the procedures for handling, storage, collection of recycling and disposal of waste.

C38. For the life of the development, the Applicant shall:

- (a) monitor the amount of waste generated by the development;
- (b) investigate ways to minimise waste generated by the development;
- (c) implement reasonable and feasible measures to minimise waste generated by the development, to the satisfaction of the Director-General.

VISUAL AMENITY AND DESIGN

Lighting

C39. The development shall ensure that the lighting associated with the development:

- (a) complies with the latest version of *AS 4282(INT) - Control of Obtrusive Effects of Outdoor Lighting*; and
- (b) is mounted, screened and directed in such a manner that it does not create a nuisance to surrounding properties or the public road network.

Signage

C40. The development shall not install any advertising signs on site without the written consent of the Council.

Fencing

C41. Any front boundary fencing must be open form, black in colour with a maximum height of 1.8 metres. Fencing of the side and rear boundaries must be 1.8 metres in height. Colourbond fencing is not permitted within any area visible from a public place.

Note: The Applicant must liaise with adjoining property owners with regard to any common boundary fencing.

LANDSCAPE AND BIODIVERSITY

C42. The Applicant shall undertake landscaping generally in accordance with the approved Landscape Plans contained in Appendix 7 of the EIS to the satisfaction of Council, subject to the following amendments:

- (a) the 'Accent Species' and 'Groundcovers' must be amended to include only species listed in the Liverpool Council *Recommended Plan Species List for Landscaping* (Appendix 2, Part 1.1 of the Liverpool DCP 2008); and
- (b) the proposed *Corymbia maculate* (Spotted Gum) must be replaced with *Eucalyptus tereticornis* (Forest Red Gum).

The Applicant must maintain landscaping for the life of the development, in accordance in accordance with the Bushfire Protection Assessment report prepared by Australian Bushfire Planners Pty Ltd dated 12

January 2013 (B121914), *Planning for Bush Fire Protection* (NSW RFS, 2006) and *Standards for Asset Protection Zones* (NSW RFS, 2006) in consultation with the NSW RFS to the satisfaction of the Director-General.

SECURITY

- C43. The Applicant shall:
- (a) install and maintain a perimeter stock fence and security gates on the site; and
 - (b) ensure that the security gates on site are locked whenever the site is unattended.

TRANSGRID EASEMENT AND INFRASTRUCTURE

- C44. The Applicant is to pay the full cost for TransGrid to alter the transmission tower's earthing system to accommodate the development as described within TransGrid's submission.

Access and Operations within the Easement

- C45. To protect and allow ongoing maintenance of the transmission tower, and to ensure that the construction and operation of the development minimises potential impacts to TransGrid's infrastructure, all works and activities associated with the development must be carried out in accordance with TransGrid submission (including their *Easement Guidelines for Third Party Development*) in consultation with Transgrid and to the satisfaction of the Director-General.
- C46. The Applicant must not store any dangerous goods within the TransGrid easement.
-

SCHEDULE D
ENVIRONMENTAL MANAGEMENT, REPORTING AND AUDITING

ENVIRONMENTAL MANAGEMENT

Environmental Management Plan

- D1. The Applicant shall prepare and implement an Environmental Management Plan for the development to the satisfaction of the Director-General. This plan must:
- (a) be submitted to the Director-General for consent prior to commencement of any construction works;
 - (b) be prepared by a suitably qualified and experienced expert;
 - (c) provide the strategic framework for environmental management of the development;
 - (d) identify the statutory requirements that apply to the development;
 - (e) describe the role, responsibility, authority, and accountability of all the key personnel involved in environmental management of the development;
 - (f) describe in detail the management measures that would be implemented to address environmental issues;
 - (g) describe in general how the environmental performance of the development would be monitored and managed;
 - (h) describe the procedures that would be implemented to:
 - keep the local community and relevant agencies informed about the operation and environmental performance of the development;
 - receive, handle, respond to, and record complaints;
 - resolve any disputes that may arise during the course of the development;
 - respond to any non-compliances; and
 - respond to emergencies; and
 - (i) include copies of the various strategies and plans that are required under the conditions of this consent once they have been approved.

REPORTING

Pre-Operation Compliance

- D2. Within 3 months of commencement of operations, the Applicant shall submit 'work as executed' plans to the Department for all the development associated with the development. These plans must be prepared by a suitably qualified and experienced expert, and include plans showing the 'work as executed' plans laid over the approved plans to demonstrate that the development has been carried out generally in accordance with the approved plans and that the internal traffic movements comply with AS2890.1 and 2890.2.

Incident Reporting

- D3. The Applicant shall notify the Director-General and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the development as soon as practicable after the Applicant becomes aware of the incident.
- D4. Within 7 days of notifying the incident, the Applicant shall provide a written report to the Department and EPA that:
- (a) describes the date, time, and nature of the incident;
 - (b) identifies the cause, or likely cause, of the incident; and
 - (c) describes what action has been taken to date address the incident and what actions are proposed to be implemented in the future to either address the consequences of the incident or avoid a recurrence of the incident.

Annual Review

- D5. One year after the commencement of operation, and annually thereafter, unless the Director-General directs otherwise, the Applicant shall review the environmental performance of the development to the satisfaction of the Director-General. The review shall:
- (a) describe the operations that were carried out in the past year;
 - (b) analyse the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the
 - relevant statutory requirements, limits or performance measures/criteria;
 - monitoring results of previous years; and
 - relevant predictions in the EIS;

- (a) identify any non-compliance over the last year, and describe what actions were (or are being) taken to ensure compliance;
- (b) identify any trends in the monitoring data over the life of the development;
- (c) provide a summary of results required for the EPL; and
- (d) describe what measure will be implemented over the next year to improve the environmental performance of the development.

Revision of Strategies, Plans & Programs

- D6. Within 3 months of the submission of an:
- (a) incident report under Condition D4 of this schedule;
 - (b) annual review under Condition D5 of this schedule;
 - (c) any modifications to this consent,
- the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Director-General.

Note: This is to ensure the strategies, plans and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development

**APPENDIX 1
PLANS AND ELEVATIONS**

DRAWING LIST

4167_DA000	COVER SHEET	NTS
4167_DA001	SITE PLAN / GROUND FLOOR	1:750
4167_DA002	SITE PLAN / ROOF PLAN	1:750
4167_DA011	BLDG 1 - GROUND FLOOR PLAN EXPANSION	1:250
4167_DA012	BLDG 1 - ROOF PLAN EXPANSION	1:250
4167_DA015	BLDG 2 - GROUND FLOOR PLAN EXPANSION	1:250
4167_DA016	BLDG 2 - MEZZANINE FLOOR PLAN	1:250
4167_DA017	BLDG 2 - ROOF PLAN EXPANSION	1:250
4167_DA018	BLDG 2 - DOCK OFFICE	1:100
4167_DA020	SITE ELEVATIONS	1:750
4167_DA021	BLDG 1 - ELEVATION EXPANSION	1:250
4167_DA025	BLDG 2 - ELEVATION EXPANSION	1:250
4167_DA031	SECTIONS	1:250
4167_DA041	BLDG 1 - RENDERED ELEVATIONS	1:250
4167_DA045	BLDG 2 - RENDERED ELEVATIONS	1:250
4167_DA061	TRAFFIC MANAGEMENT PLAN	1:750



mainfreight facility - proposed expansion

prestons distribution centre

26 yarrawa street, PRESTONS

development application

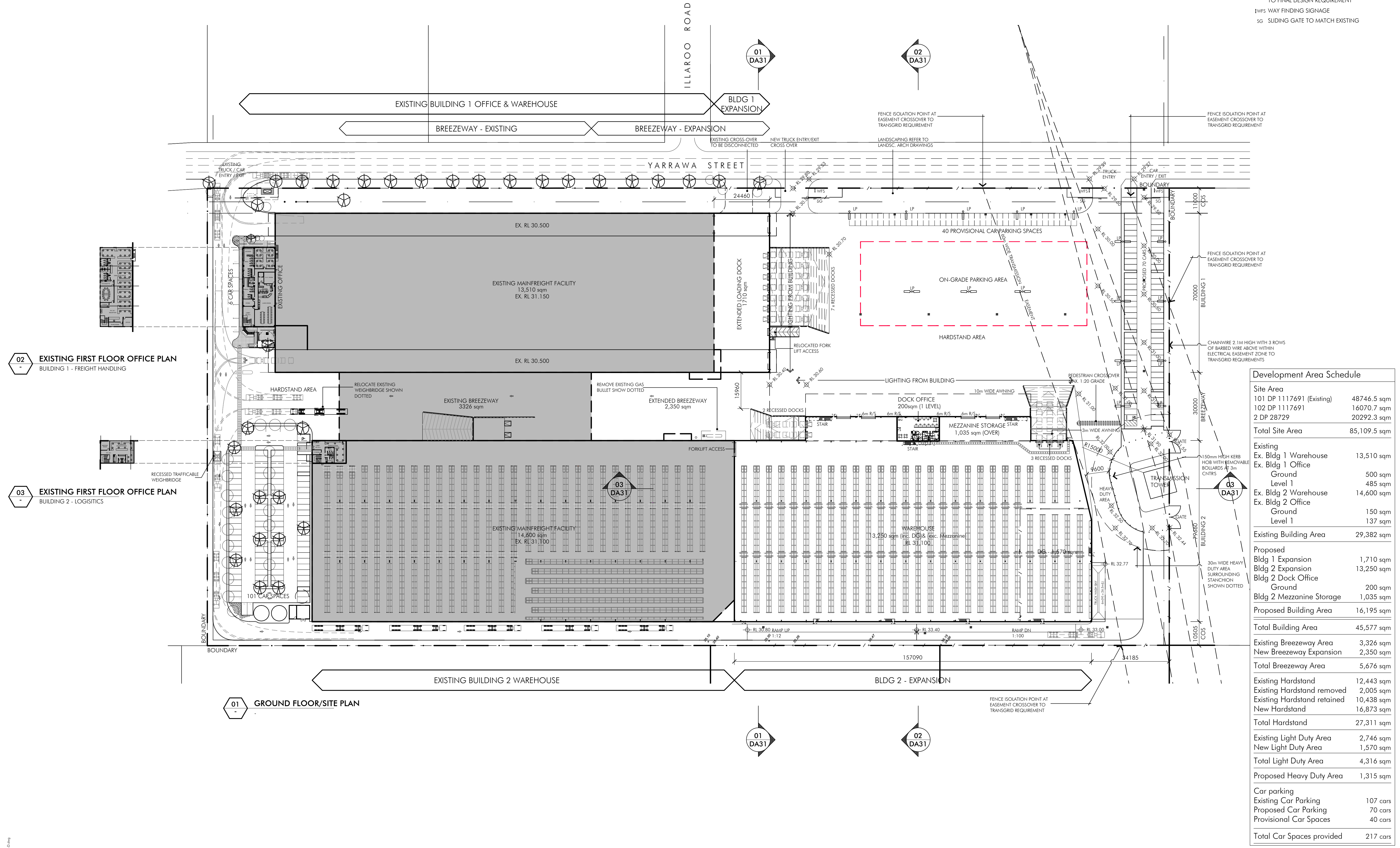
20 february, 2013

LEGEND

LP LIGHT POST - MAX. 4m ABOVE FRL WITHIN TRANSGRID ELECTRICAL EASEMENT ZONE. SCHEMATIC LIGHTING ONLY AND SUBJECT TO FINAL DESIGN REQUIREMENT

WFS WAY FINDING SIGNAGE

SG SLIDING GATE TO MATCH EXISTING



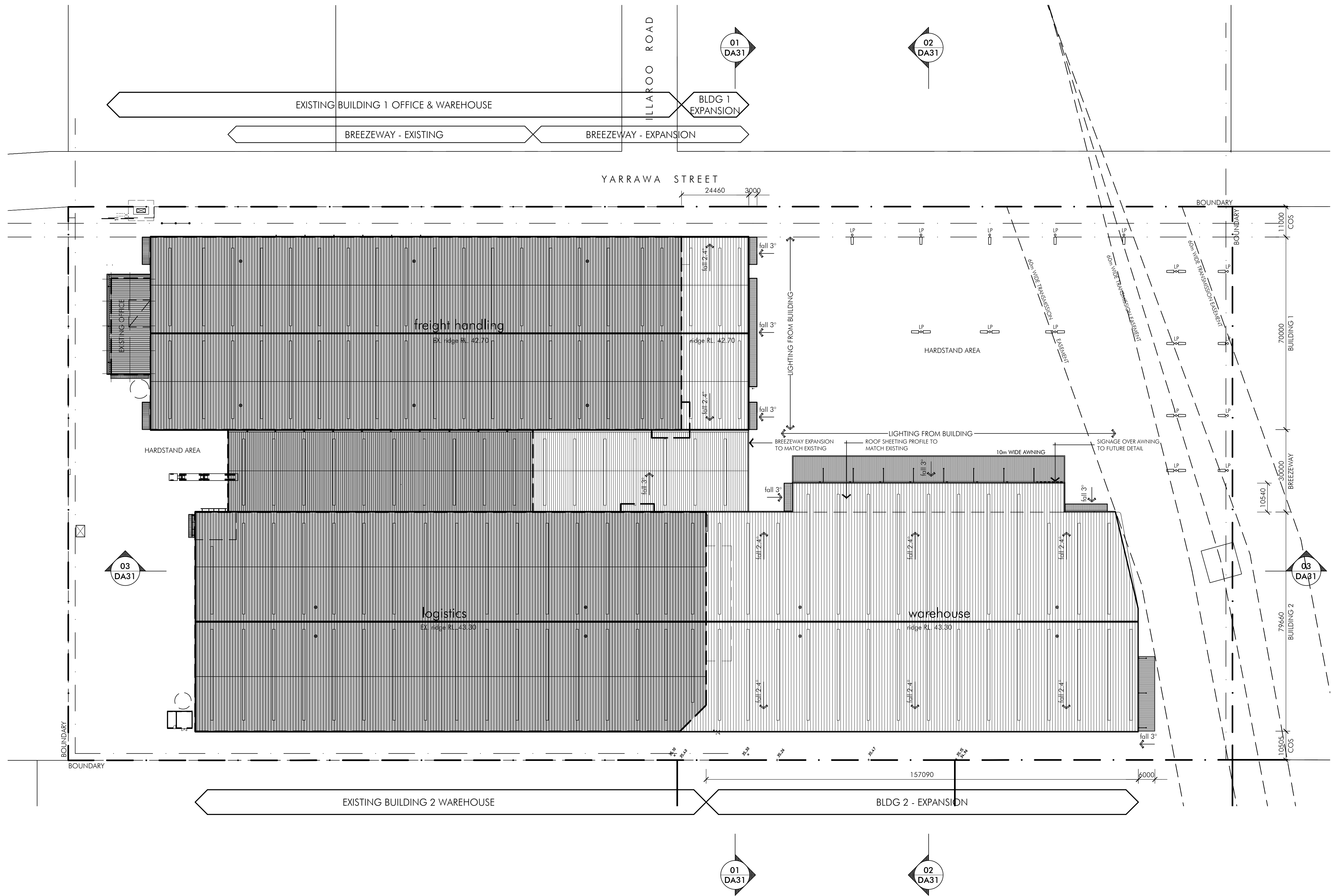
02 - EXISTING FIRST FLOOR OFFICE PLAN
BUILDING 1 - FREIGHT HANDLING

03 - EXISTING FIRST FLOOR OFFICE PLAN
BUILDING 2 - LOGISTICS

01 - GROUND FLOOR/SITE PLAN

Development Area Schedule		
Site Area		
101 DP 1117691 (Existing)	48746.5 sqm	
102 DP 1117691	16070.7 sqm	
2 DP 28729	20292.3 sqm	
Total Site Area	85,109.5 sqm	
Existing		
Ex. Bldg 1 Warehouse	13,510 sqm	
Ex. Bldg 1 Office		
Ground	500 sqm	
Level 1	485 sqm	
Ex. Bldg 2 Warehouse	14,600 sqm	
Ex. Bldg 2 Office		
Ground	150 sqm	
Level 1	137 sqm	
Existing Building Area	29,382 sqm	
Proposed		
Bldg 1 Expansion	1,710 sqm	
Bldg 2 Expansion	13,250 sqm	
Bldg 2 Dock Office		
Ground	200 sqm	
Bldg 2 Mezzanine Storage	1,035 sqm	
Proposed Building Area	16,195 sqm	
Total Building Area	45,577 sqm	
Existing Breezeway Area	3,326 sqm	
New Breezeway Expansion	2,350 sqm	
Total Breezeway Area	5,676 sqm	
Existing Hardstand	12,443 sqm	
Existing Hardstand removed	2,005 sqm	
Existing Hardstand retained	10,438 sqm	
New Hardstand	16,873 sqm	
Total Hardstand	27,311 sqm	
Existing Light Duty Area	2,746 sqm	
New Light Duty Area	1,570 sqm	
Total Light Duty Area	4,316 sqm	
Proposed Heavy Duty Area	1,315 sqm	
Car parking		
Existing Car Parking	107 cars	
Proposed Car Parking	70 cars	
Provisional Car Spaces	40 cars	
Total Car Spaces provided	217 cars	

LEGEND
LP LIGHT POST - MAX. 4m ABOVE FRL WITHIN
TRANSGRID ELECTRICAL EASEMENT ZONE.
SCHEMATIC LIGHTING ONLY AND SUBJECT
TO FINAL DESIGN REQUIREMENT



Issue	Description	Date
A	ISSUE FOR DEVELOPMENT APPLICATION	20.02.2013

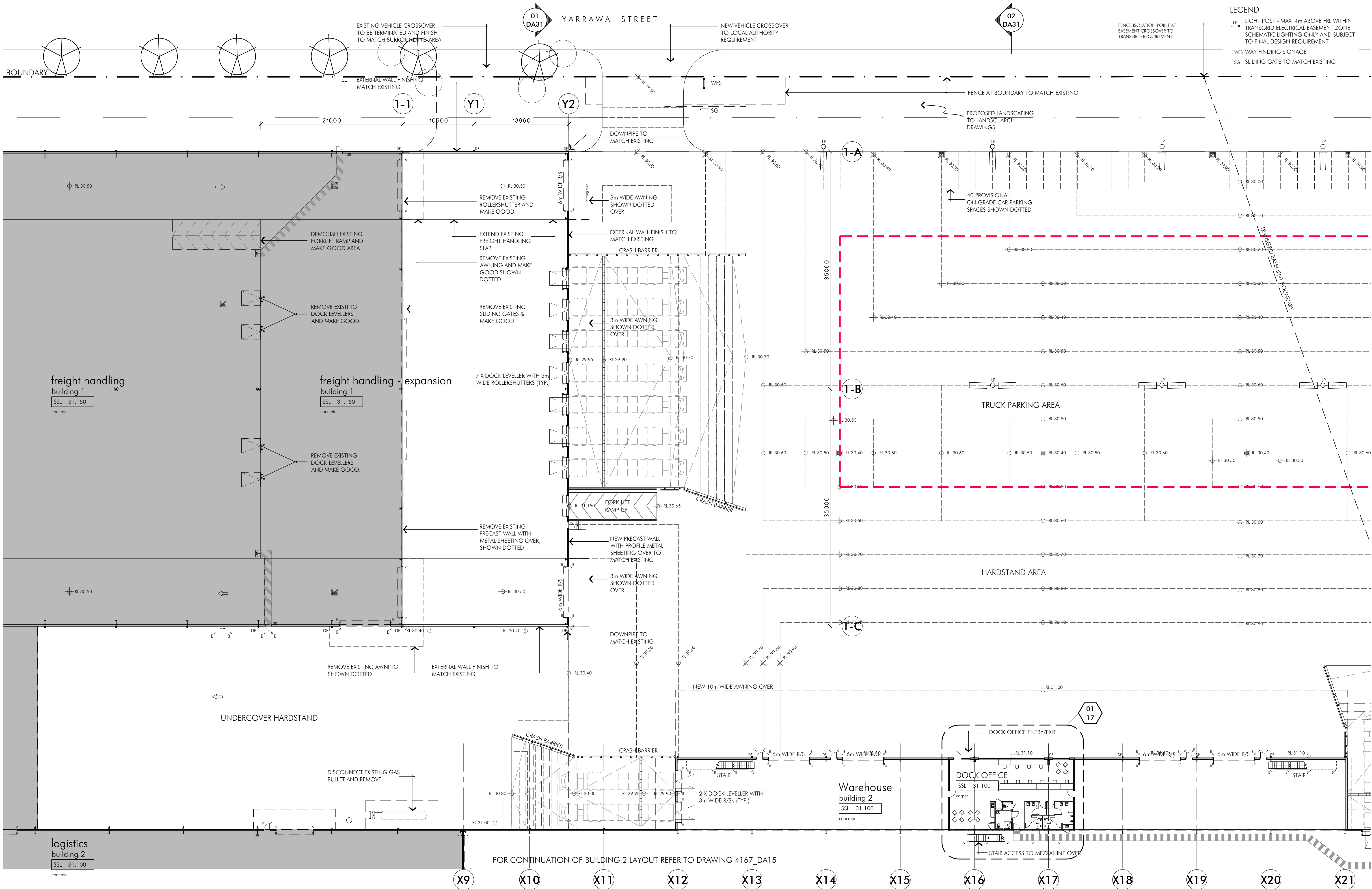
Title
Scale
Date

Number
0 7.5 15

Site Plan / Roof Plan
1:750 (A1) / 1:1500 (A3)
Feb 2013
4167_DA002
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nt
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Client

GOODMAN

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Project

MAINFREIGHT FACILITY - PROPOSED EXPANSION
PRESTONS DISTRIBUTION CENTRE
26 YARRAWA STREET, PRESTONS

Issue

1

DESCRIPTION

ISSUE FOR DEVELOPMENT APPLICATION

DATE

20.02.2013

Title

Bldg 1 - Ground Floor Plan

Scale

1:250 (A1) / 1:500 (A3)

Date

Feb 2013

Number

0 2.5 5

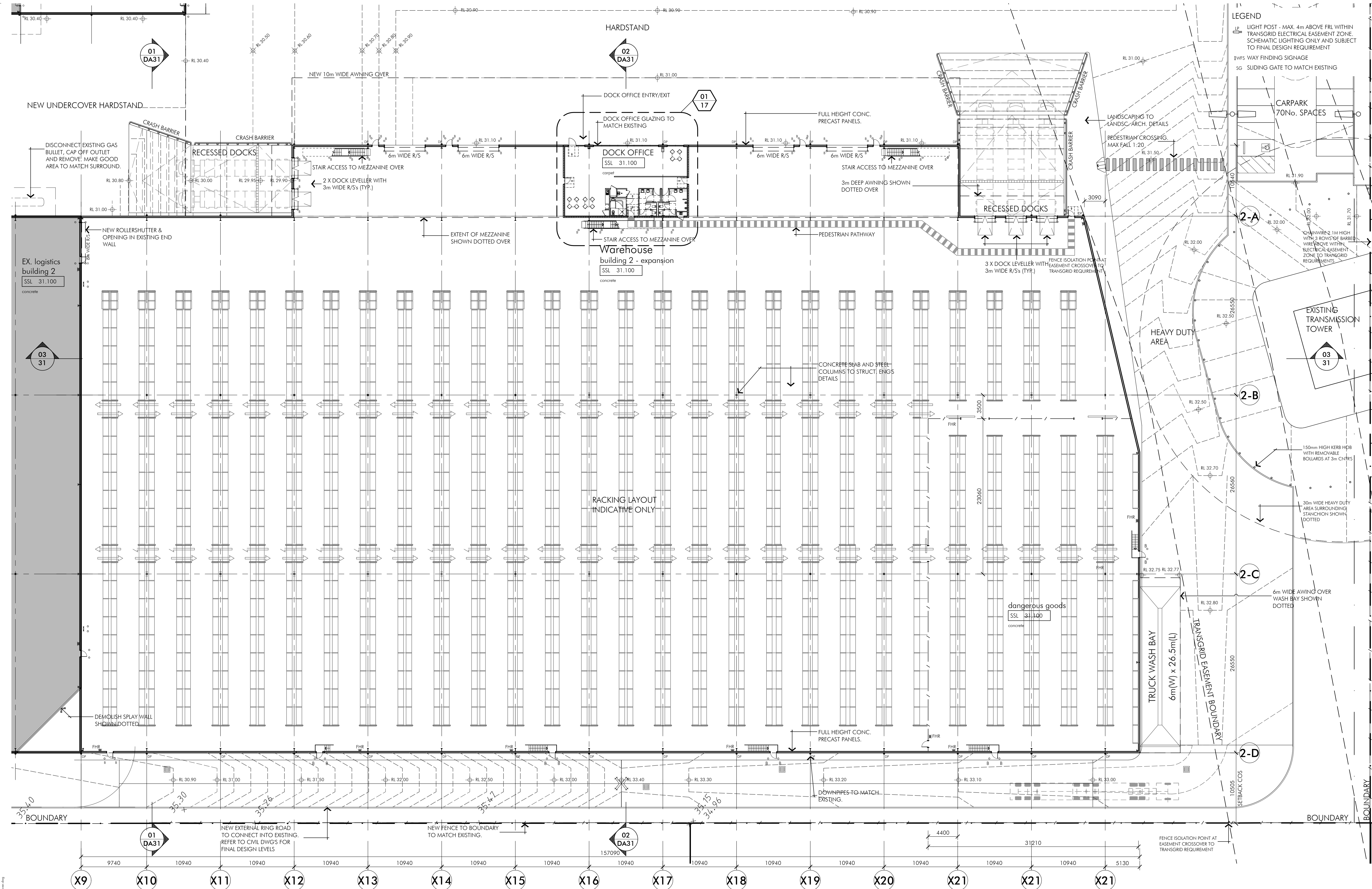
12.5 25m

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MAINFREIGHT FACILITY - PROPOSED EXPANSION
PRESTONS DISTRIBUTION CENTRE
26 YARRAWA STREET, PRESTONS

Issue

Description

Date

1

A

ISSUE FOR DEVELOPMENT APPLICATION

20.02.2013

Title

Bldg 2 - Ground Floor Plan

Scale

1:250 (A1) / 1:500 (A3)

Date

Feb 2013

Number

0 1 2

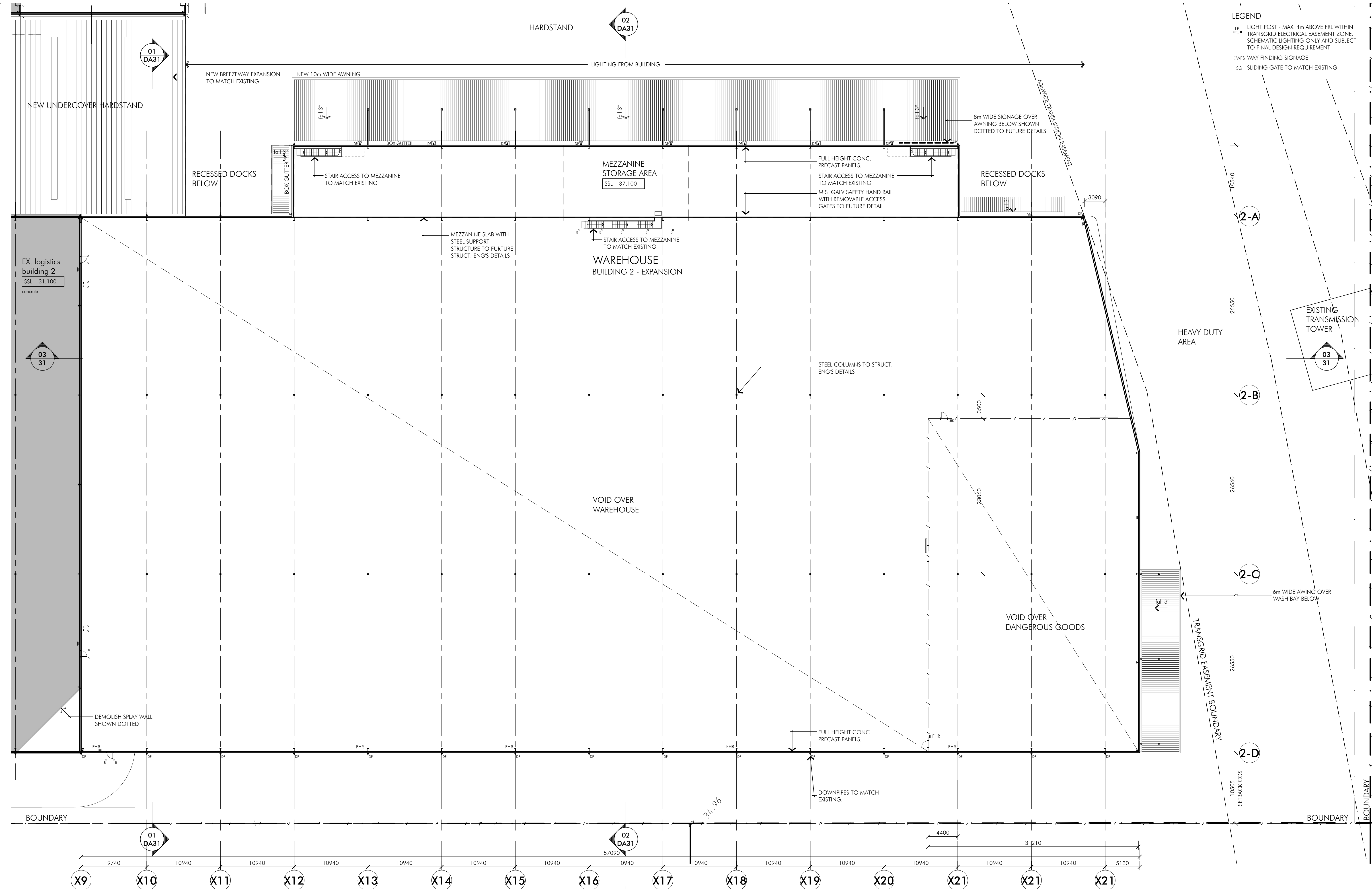
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10m

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Project

MAINFREIGHT FACILITY - PROPOSED EXPANSION

PRESTONS DISTRIBUTION CENTRE
26 YARRAWA STREET, PRESTONS

Issue	Description	Date
A	ISSUE FOR DEVELOPMENT APPLICATION	20.02.2013

Title

Bldg 2 - Mezzanine Floor Plan

Scale

1:250 (A1) / 1:500 (A3)

Date

Feb 2013

Number

0 1 2

5 10m

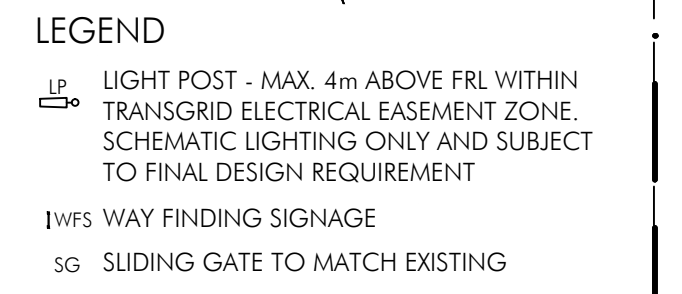
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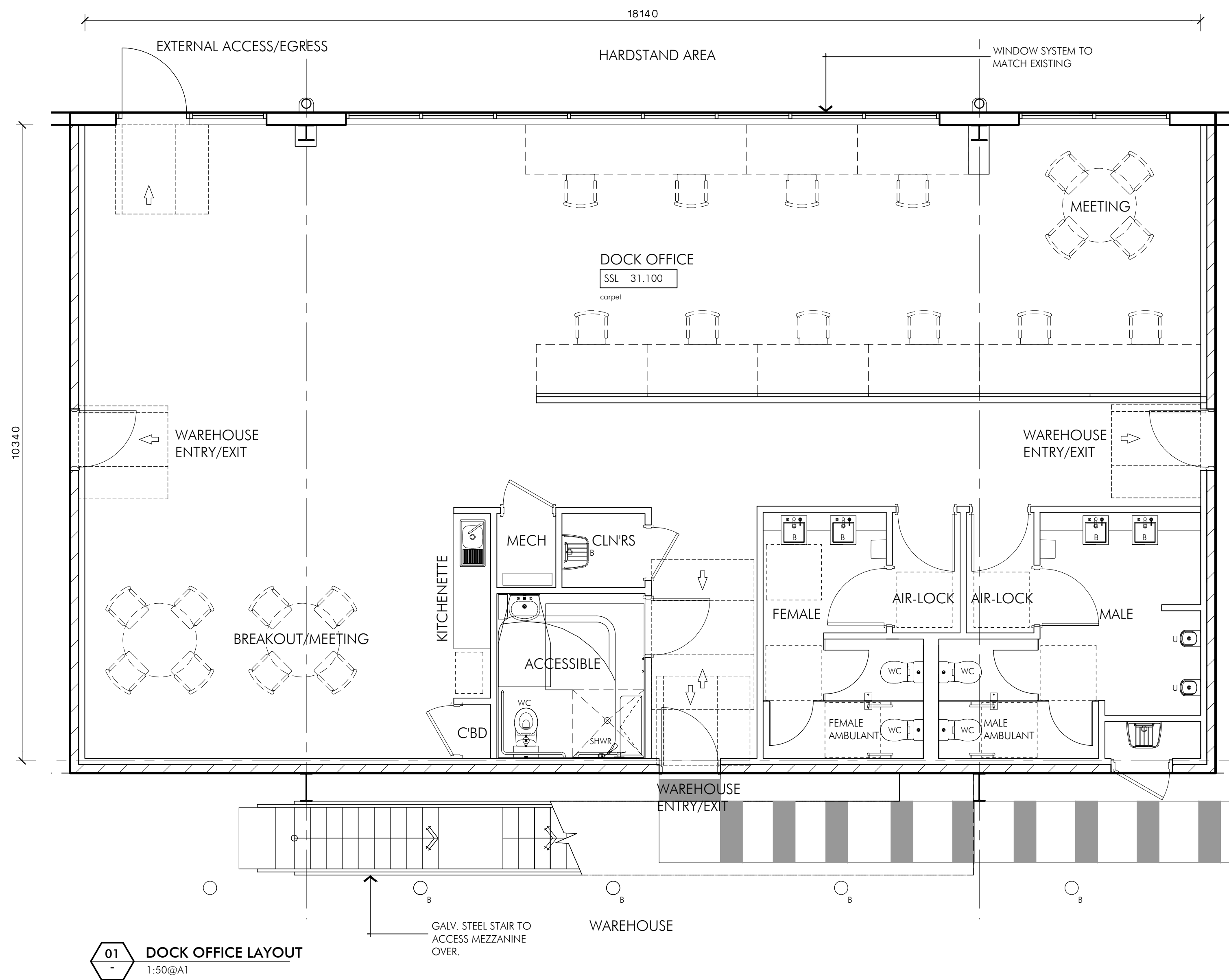
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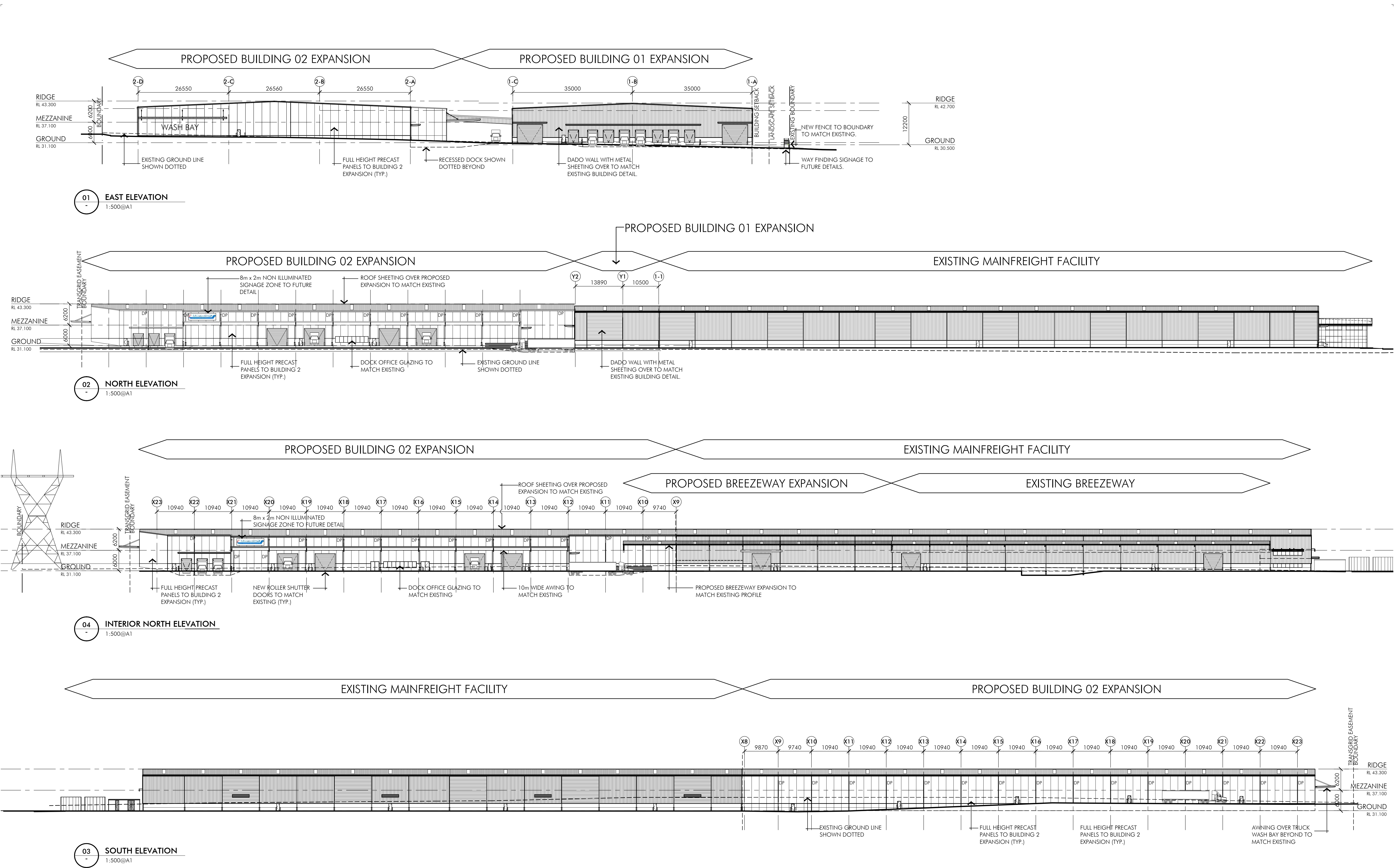
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e sydney@nettletontribe.com.au w nettletontribe.com.au

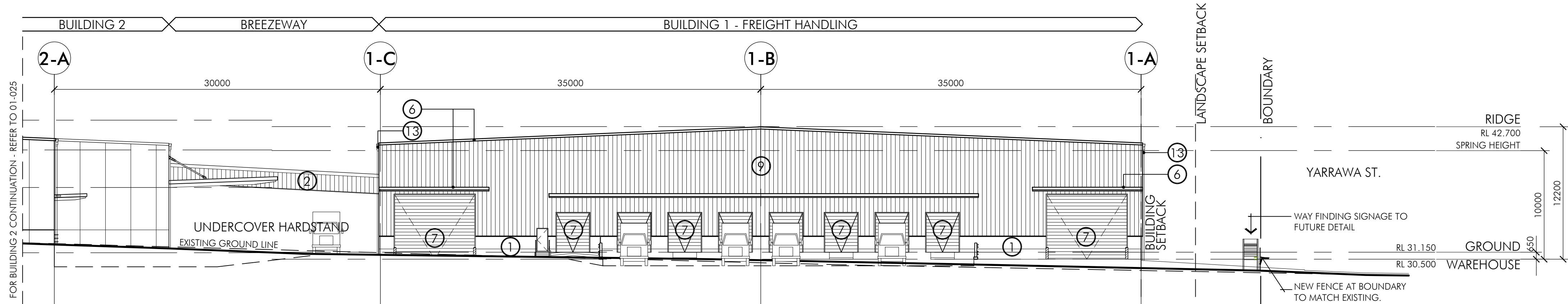
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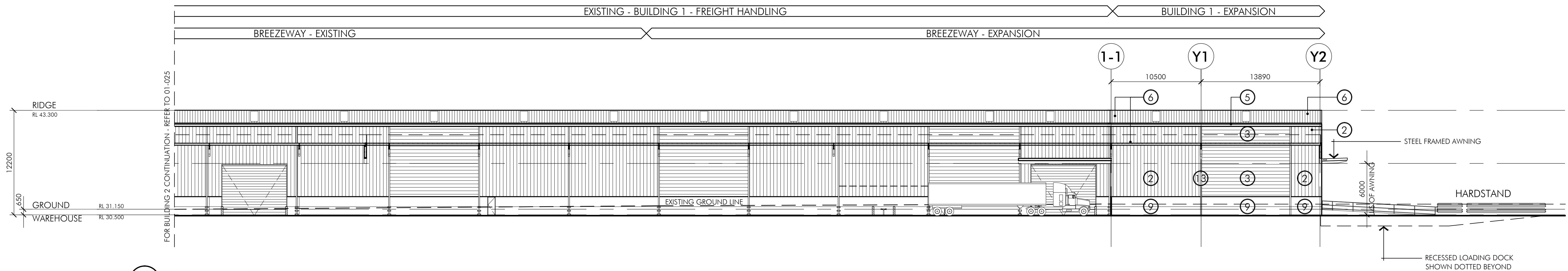


Issue	Description	Date
A	ISSUE FOR DEVELOPMENT APPLICATION	20.02.2013

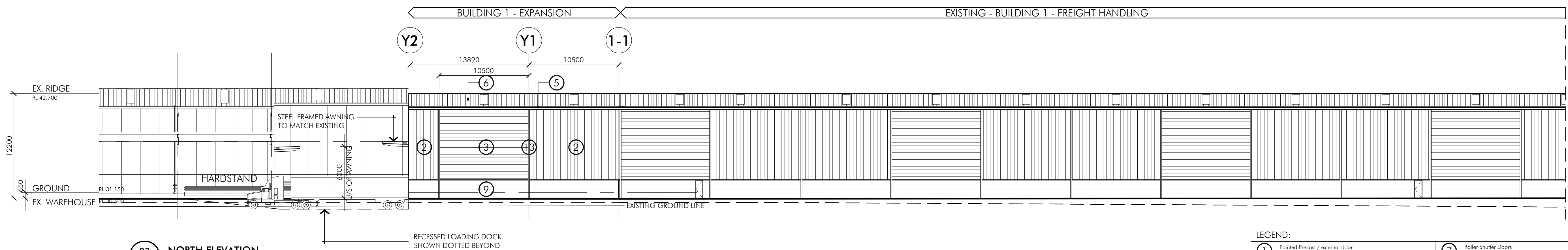




01 EAST ELEVATION
FREIGHT HANDLING - BUILDING 1



02 SOUTH ELEVATION
FREIGHT HANDLING - BUILDING 1



03 NORTH ELEVATION
FREIGHT HANDLING - BUILDING 1

LEGEND:

1	Painted Precast / external door (Colour - Dulux CC2 - Mainfreight Blue)	7	Roller Shutter Doors (Colour - Dulux CC2 - Mainfreight Blue)	12	Powdercoat Aluminium Sunshade / Louvre (Colour - Precious Silver Pearl)
2	Profiled Metal Sheeting (wall cladding) - Trimdek Colour - Dulux CC2 - Mainfreight Blue (installed vertically)	8	Office wall cladding - Alucabond (Colour - white 16)	13	Stainless Steel Downpipes (Colour - 316 Stainless Steel)
3	Profiled Metal Sheeting (wall cladding) - Trimdek Colour - Dulux CC2 - Mainfreight Blue (installed horizontally)	9	Painted precast / external sheeting/ door (Colour - Alabaster white)	14	Honed Blackwork (Colour - Alabaster)
4	Profiled Metal Sheeting (wall cladding) - Trimdek Colour - Dulux 668B 10/298 - Mainfreight Deep Blue (installed horizontally)	10	Powdercoat Aluminium Window Frame (Colour - Precious Silver Pearl)	B	Ballard
5	Awning fascia, downpipes and gutter (wall cladding) - Trimdek Colour - Dulux 668B 10/298 - Mainfreight Deep Blue	11	A) Window Glazing (Colour - TS21 on Clear)	ADP	Awning downpipe
6	Profiled Roof Sheeting - Trimdek Colour - Zincalume	B)	Window Glazing with backing board behind (Colour - TS21 on Clear)	DP	Downpipe
				FJ	False joint
				PJ	Panel joint
				GJ	Glass silicon (clear) joint with mullion behind
				O/F	Overflow channels to eng's requirements

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PROPOSED MAINFREIGHT EXPANSION FACILITY
PRESTONS DISTRIBUTION CENTRE
26 YARRAWA STREET, PRESTONS

Issue	Description	Date
A	ISSUE FOR DEVELOPMENT APPLICATION	20.02.2013

Building 1 - Building Elevations
1:250 (A1) / 1:500 (A3)
Dec 2012

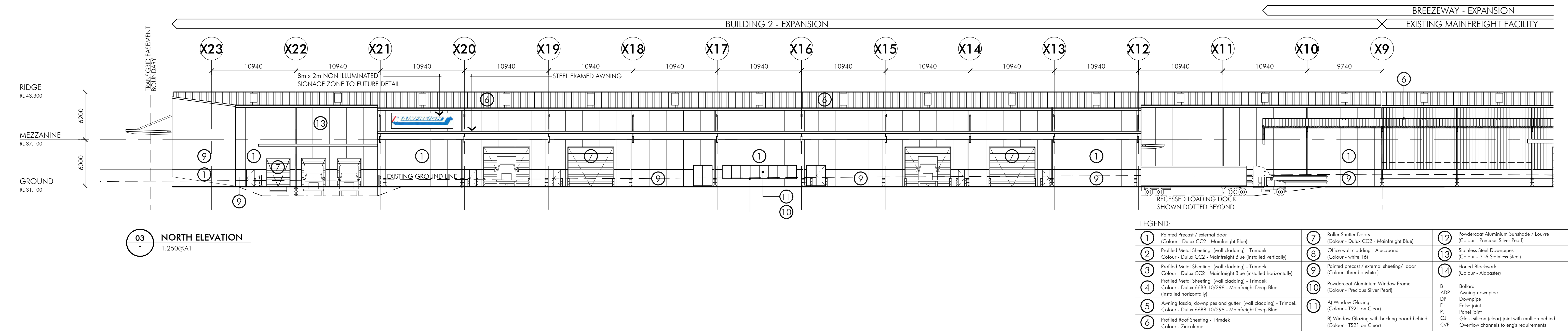
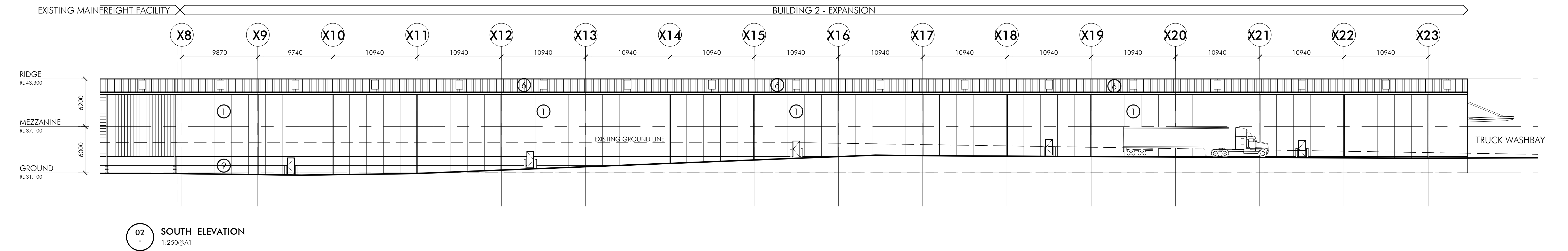
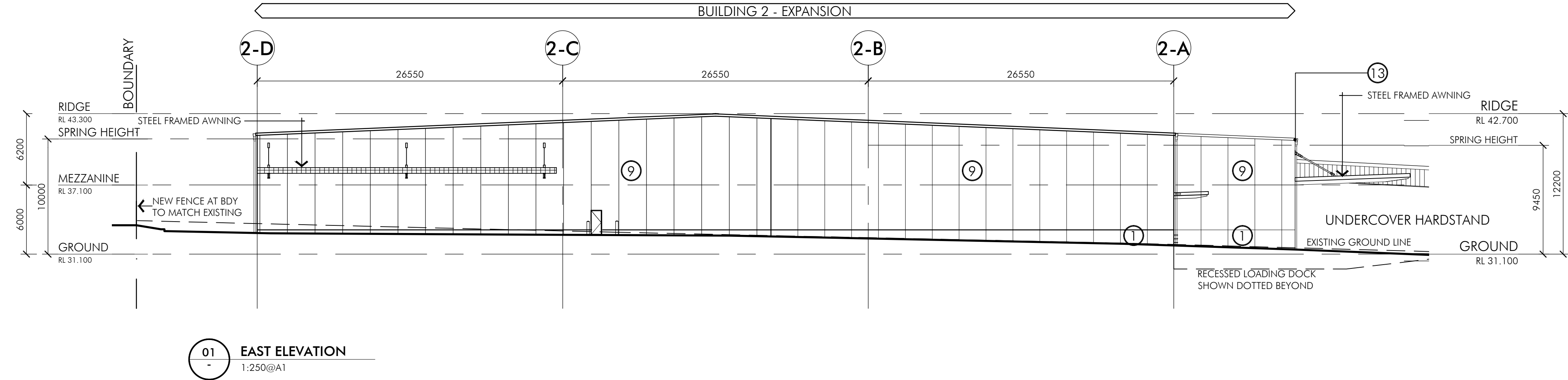
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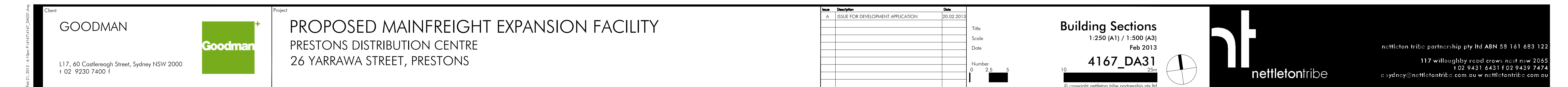
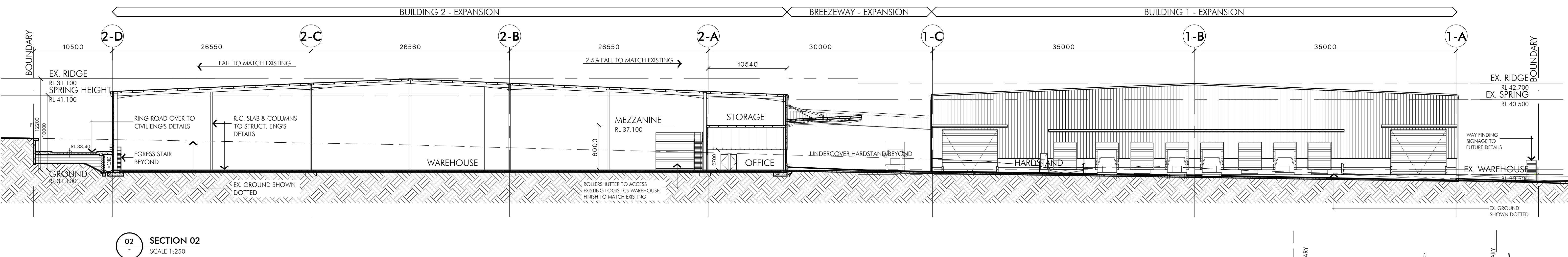
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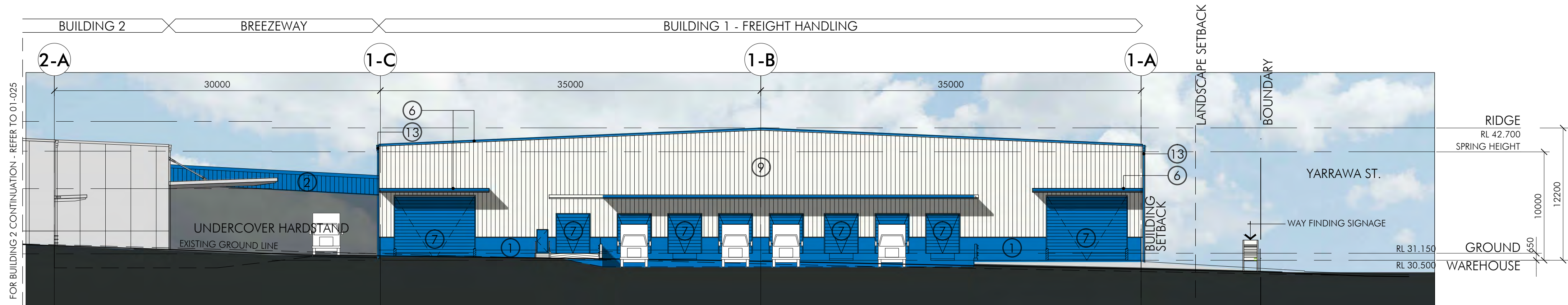


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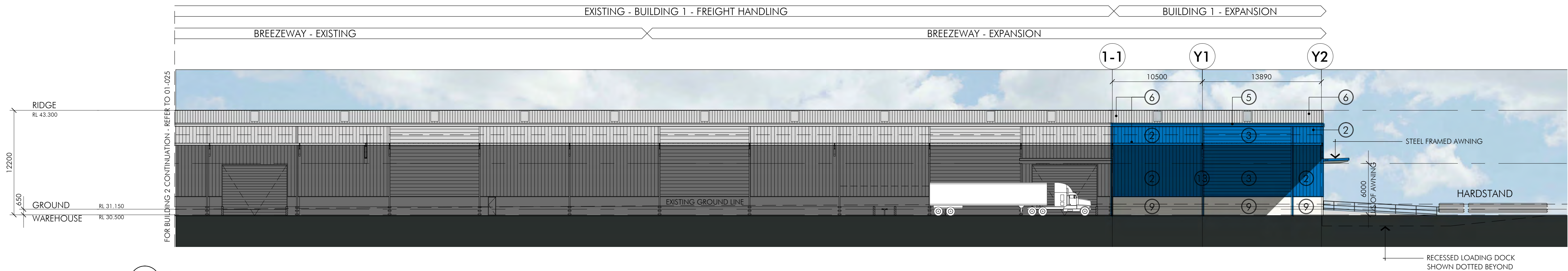
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e sydney@nettletontribe.com.au w nettletontribe.com.au



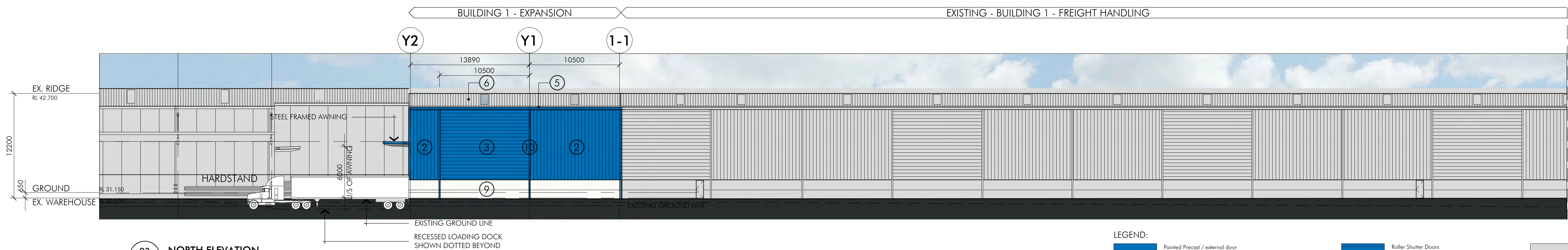




01 EAST ELEVATION
FREIGHT HANDLING - BUILDING 1



02 SOUTH ELEVATION
FREIGHT HANDLING - BUILDING 1



03 NORTH ELEVATION
FREIGHT HANDLING - BUILDING 1

LEGEND:

	Painted Precast / external door (Colour - Dulux CC2 - Mainfreight Blue)		Roller Shutter Doors (Colour - Dulux CC2 - Mainfreight Blue)		Powdercoat Aluminium Sunshade / Louvre (Colour - Precious Silver Pearl)
	Profiled Metal Sheeting (wall cladding) - Trimdek Colour - Dulux CC2 - Mainfreight Blue (installed vertically)		Office wall cladding - Alucabond (Colour - white 16)		Stainless Steel Downpipes (Colour - Dulux CC2 - Mainfreight Blue)
	Profiled Metal Sheeting (wall cladding) - Trimdek Colour - Dulux CC2 - Mainfreight Blue (installed horizontally)		Painted precast / external sheeting/ door (Colour - fireproof white)		Powdercoat Aluminium Window Frame (Colour - Precious Silver Pearl)
	Profiled Metal Sheeting (wall cladding) - Trimdek Colour - Dulux 668B 10/298 - Mainfreight Deep Blue (installed horizontally)		A) Window Glazing (Colour - TS21 on Clear)		
	Awning fascia, downpipes and gutter (wall cladding) - Trimdek Colour - Dulux 668B 10/298 - Mainfreight Deep Blue		B) Window Glazing with backing board behind (Colour - TS21 on Clear)		
	Profiled Roof Sheeting - Trimdek Colour - Zincalume				

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PROPOSED MAINFREIGHT EXPANSION FACILITY
PRESTONS DISTRIBUTION CENTRE
26 YARRAWA STREET, PRESTONS

Issue	Description	Date
A	ISSUE FOR DEVELOPMENT APPLICATION	20.02.13

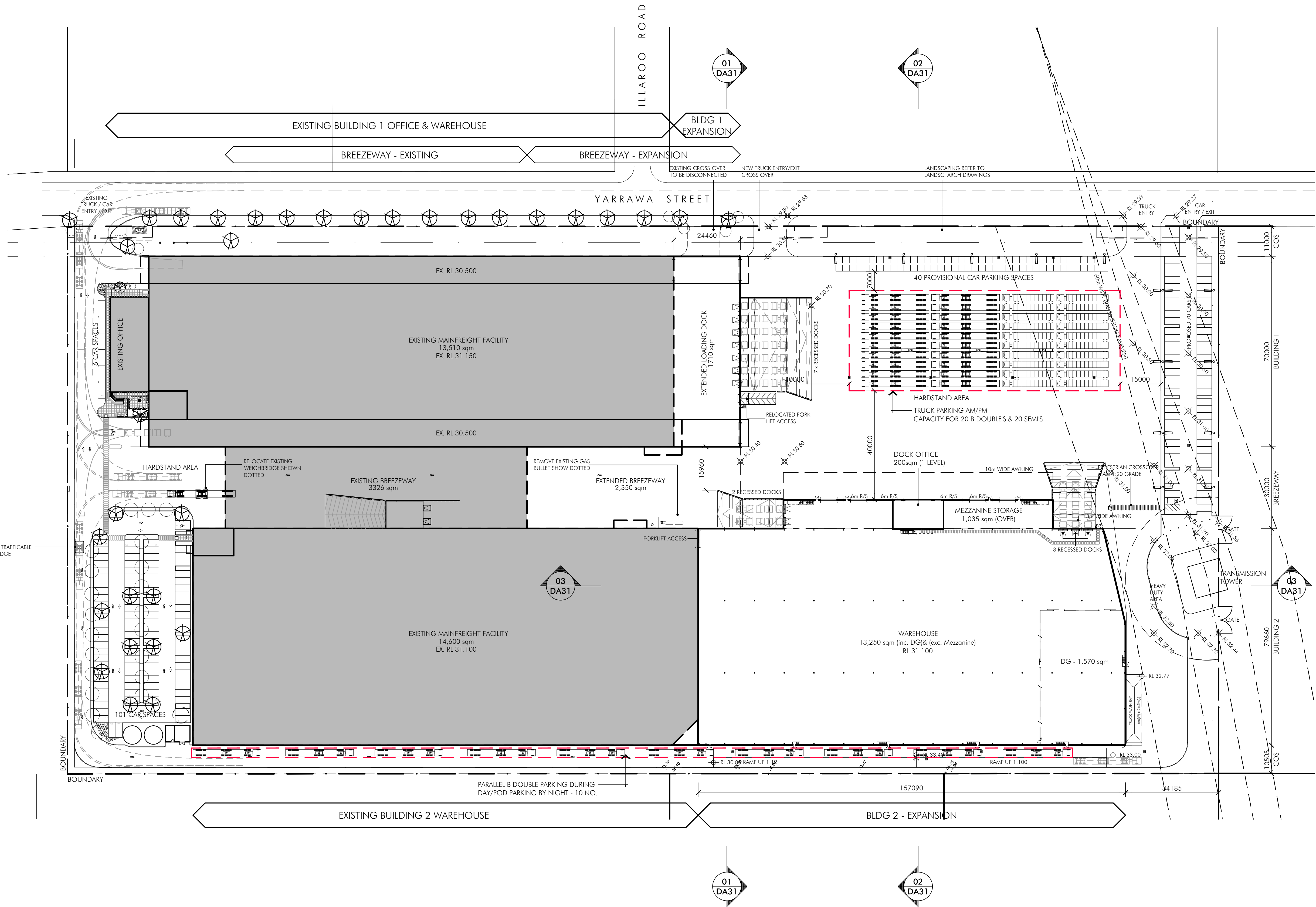
Bldg 1 - Rendered Elevations
1:250 (A1) / 1:500 (A3)
Feb 2013
4167_DA041
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- | | |
|---|--|
|  | Powdercoat Aluminium Sunshade / Louvre
(Colour - Precious Silver Pearl) |
|  | Stainless Steel Downpipes
(Colour - Dulux CC2 - Mainfreight Blue) |



GOODMAN

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MAINFREIGHT FACILITY - PROPOSED EXPANSION

PRESTONS DISTRIBUTION CENTRE
26 YARRAWA STREET, PRESTONS

Issue	Description	Date
A	ISSUE FOR DEVELOPMENT APPLICATION	20.02.2013
B	ANNOTATION UPDATED	05.07.2013

Title
Scale
Date

traffic management plan
1:750 (A1) / 1:1500 (A3)
July 2013

4167_DA061

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nettleton tribe partnership Pty Ltd ABN 58 161 683 122

117 willoughby road crows nest NSW 2065
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APPENDIX 2
STATEMENT OF COMMITMENTS

Response to Submissions

Expansion to Existing Mainfreight Facility including Storage of Dangerous Goods (Chemical Storage Facility)
30-50 Yarrowa Street, Prestons NSW

PART D REVISED DRAFT STATEMENT OF COMMITMENTS

4.1 OVERVIEW

The majority of the commitments detailed with Part D of the EIS remain relevant to the Project. The following Section outlines where certain commitments have been revised and where additional commitments have been added following the exhibition and review of submissions.

Matters added to the Statement of Commitments are shown in blue underlined text. Items removed are crossed out in ~~red~~.

4.2 REVISED DRAFT STATEMENT OF COMMITMENTS

by Goodman Property Services (Aust) Pty Ltd
in relation to Expansion to Mainfreight Warehouse and Distribution Centre including the storage of dangerous goods (Chemical Storage Facility)
at 30-50 Yarrowa Street, Prestons

Mainfreight will undertake the proposed occupation of the Chemical Storage Facility at 30-50 Yarrowa Street, Prestons in accordance with the following commitments:

The following defines some of the terms and abbreviations used in the Statement of Commitments:

Approval	The Minister's approval to the Project
BCA	Building Code of Australia
Council	Liverpool City Council
Department	Department of Planning and Infrastructure
Director-General	Director-General of the Department (or delegate)
EIS	Environmental Impact Statement
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
Goodman	Goodman Property Services (Aust) Pty Ltd
Project	The development as described in the EIS
Site	Land to which the project application applies
WorkCover	NSW WorkCover

ADMINISTRATIVE COMMITMENTS

Commitment to Minimise Harm to the Environment

1. Goodman will implement all reasonable and feasible measures to prevent and/or minimise any harm to the environment that may result from the construction or operation of the project including the reduction of greenhouse gas emissions.

Occupation Certificate

2. Goodman will ensure an Occupation Certificate is obtained prior to the occupation of the facility for the purposes of storing dangerous goods.

Terms of Approval

3. Goodman will carry out the project generally in accordance with the:
 - a) Environmental Impact Statement;
 - b) Preliminary Hazard Analysis;



Response to Submissions

Expansion to Existing Mainfreight Facility including Storage of Dangerous Goods (Chemical Storage Facility)
30-50 Yarrowa Street, Prestons NSW

- c) Drawings (Nettleton Tribe Drawing – 4167_DA01);
~~(d) This Statement of Commitments; and~~
~~(e) Any Conditions of Approval.~~
[\(d\) Response to Submissions Report;](#)
[\(e\) This Statement of Commitments; and](#)
[\(f\) Any Conditions of Approval.](#)
- 4. If there is any inconsistency between the above, the Conditions of Approval shall prevail to the extent of the inconsistency.
- 5. Goodman will ensure compliance with any reasonable requirement/s of the Director-General of the Department of Planning and Infrastructure arising from the Department's assessment of:
 - a) Any reports, plans, programs, strategies or correspondence that are submitted in accordance with this Approval; and
 - b) The implementation of any recommended actions or measures contained in reports, plans, programs, strategies or correspondence submitted by the Project Team as part of the application for Approval.

Structural Adequacy

- 6. Goodman will ensure that all new buildings and structures on the site are constructed in accordance with the relevant requirements of the BCA.

Construction Traffic Management Plan

- 7. Goodman will ensure a Construction Traffic Management Plan is prepared and implemented in consultation with Council, and to the satisfaction of the Director-General. This plan will:
 - a) be submitted to the Director-General for approval prior to the commencement of construction;
 - b) describe the traffic volumes and movements to occur during construction;
 - c) detail proposed measures to minimise the impact of construction traffic on the surrounding network, including driver behaviour and vehicle maintenance; and
 - d) detail the procedures to be implemented in the event of a complaint from the public regarding construction traffic.

Operation of Plant and Equipment

- 8. Goodman will ensure that all plant and equipment used on site is maintained and operated in proper and efficient manner, and in accordance with relevant Australian Standards.

SPECIFIC ENVIRONMENTAL COMMITMENTS

Noise

- 9. Construction on the site will only be undertaken between 7am and 6pm Monday to Friday, and 7am and 1pm on Saturdays. No construction will be allowed on site on Sundays or public holidays.
- 10. [Noise impacts from construction activities shall be minimised at all times. Therefore, construction works will be undertaken in accordance with best practice measures, as outlined in AS2436-2010 'Guide to noise and vibration control on construction, demolition and maintenance sites.' Best practice construction noise mitigation measures may include:](#)
 - [The selection screw piling, in lieu of percussive piling;](#)
 - [Scheduling noisier activities for less sensitive periods;](#)
 - [Selection of 'quiet' plant and equipment](#)



Response to Submissions

Expansion to Existing Mainfreight Facility including Storage of Dangerous Goods (Chemical Storage Facility)
30-50 Yarrowa Street, Prestons NSW

- [Erection of site hoardings;](#)
- [Use of intervening buildings to screen construction noise to the residential areas;](#)
- [Distance attenuation for noisy plant items \(or safe operating distances\)](#)

11. [Noise from mechanical plant installed at the Site shall achieve the NSW INP criteria at residential locations at night.](#)

Air

Construction Traffic

12. During construction:

- a) all trucks entering or leaving the site with loads have their loads covered;
- b) trucks associated with the project do not track dirt onto the public road network; and
- c) the public roads used by these trucks are kept clean.

Dust Management

13. During the construction phase of the project, all reasonable and feasible measures to minimise the dust generated by the project.

14. [As outlined in The Air Quality Impact Assessment report \(SLR, 16 April 2013\) the following measures will be considered where practical:](#)

- [the use of renewable energy technologies, such as wind, solar or biomass for externally-sourced electricity;](#)
- [close regulation of the daily operation of lighting; and](#)
- [solar-powered lighting about site.](#)

Hazard and Risk

Pre-Occupation Certificate

15. Prior to the occupation of the facility (associated with storage of dangerous goods), Goodman will prepare a Fire Safety Study that shall address the relevant aspects of the Department of Planning and Infrastructure's *Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Study Guidelines*. The Fire Safety Study shall be kept on site and presented to the Director-General on request.

Pre-commissioning

16. Prior to the commencement of commissioning of the project, Goodman ensure the plans and systems set out under subsections (a) to (b) below will be developed and implemented:

- a) **Emergency Plan**
A comprehensive Emergency Plan and detailed emergency procedures will be prepared for the proposed land use. This plan will include detailed procedures for the safety of all people outside of the development who may be at risk from the development. The Plan shall be in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 1 – Industry Emergency Planning Guidelines*.
- b) **Safety Management System**
A document setting out a comprehensive Safety Management System, covering all onsite operations and activities involving hazardous materials. The document shall clearly specify all safety related procedures, responsibilities and policies, along with details of mechanisms for ensuring adherence to the procedures. Records will be kept onsite and will be available for inspection by the Council upon request. The Safety Management System will be developed in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 9 – Safety Management*.



Response to Submissions

Expansion to Existing Mainfreight Facility including Storage of Dangerous Goods (Chemical Storage Facility)
30-50 Yarrowa Street, Prestons NSW

Ongoing

17. Goodman will ensure the following is undertaken on an ongoing basis as part of the proposed development as outlined in subsections (a) and (b) below.

a) Incident Report

Within 24 hours of any incident or potential incident with actual or potential significant offsite impacts on people of the biophysical environment, a report will be supplied to the Department outlining the basic facts. A further detailed report will be prepared and submitted following investigations of the causes and identification of necessary additional preventive measures. That report will be submitted to the Department no later than 14 days after the incident or potential incident.

b) Hazard Audit

Twelve months after the commencement of operations of the proposed development or within such further period as the Department may agree, Goodman will carry out a comprehensive Hazard Audit of the proposed development and within one month of the audit submit a report to the Department.

The audit will be carried out at Goodman's expense by a duly qualified independent person or team approved by the Department prior to commencement of the audit. Further audits will be carried out every three years or as determined by the Department and a report of each audit will, within one month of the audit, be submitted to the Department. Hazard Audits will be carried out in accordance with the Department's *Hazardous Industry Planning Advisory Paper No. 5 – Hazard Audit Guidelines*.

The audit will include a review of the site Safety Management System and a review of all entries made in the incident register since the previous audit. The audit report will be accompanied by a program for the implementation of all recommendations made in the audit report. If Goodman intends to defer the implementation of a recommendation, justification will be included.

Waste Management

18. Goodman will ensure that all waste generated on site during construction and operation is classified in accordance with the Office of Environmental and Heritage's *Waste Classification Guidelines: Part 1 Classifying Waste* and disposed of to a facility that may lawfully accept the waste.

Stormwater Management

19. The isolation valves located in the stormwater system are to be clearly labelled.
20. A Maintenance/service plan is to be put in place to ensure that the stormwater isolation valves are maintained in a serviceable condition.
21. All external stormwater drains are to be clearly identified as stormwater drains.
22. Spill kits are to be located and maintained adjacent to external trafficable areas of the premises.
23. The breezeway is to be fully isolated from the stormwater system at all times.

TransGrid Easement

24. Compliance with TransGrid's requirements, including storage of Dangerous Goods not permitted within the TransGrid Easement shall be undertaken at all times.



Response to Submissions

Expansion to Existing Mainfreight Facility including Storage of Dangerous Goods (Chemical Storage Facility)
30-50 Yarrowa Street, Prestons NSW

Bushfire Management

25. [Water provision and hazard management techniques for landscaped gardens areas/spaces shall be undertaken in accordance with Section 6 of the Bushfire Protection Assessment undertaken by Australian Bushfire Protection Planners Pty Ltd \(ABPP\).](#)
26. [A Positive Covenant will be placed on the title of the land to ensure compliance with the management prescriptions for the Defensible Spaces identified in the report Bushfire Protection Assessment undertaken by Australian Bushfire Protection Planners Pty Ltd \(ABPP\).](#)

END

Name:

Signed:

Date:



Notice of Modification

Section 96(1A) of the *Environmental Planning and Assessment Act 1979*

As delegate for the Minister for Planning and Environment under delegation dated 14 September 2011, I modify the development consent referred to in Schedule 1, subject to the conditions in Schedule 2.



Chris Ritchie
A / Director
Industry, Key Sites and Social Projects

Sydney 27 MAY

2014

SCHEDULE 1

The development consent (SSD 5746) granted by the Minister for Planning and Infrastructure for the expansion of the Mainfreight storage and distribution centre on 9 August 2013.

SCHEDULE 2

1. In the Definitions list, amend the definition of 'Development' to include "*as modified by SSD 5746 MOD1,*" after the word "RTS".
2. In the Definitions list, delete the definitions for 'Department' and 'Director-General', and insert the following definitions in alphabetical order:

Department	Department of Planning and Environment
Secretary	Secretary of the Department, or nominee
SSD 5746 MOD 1	Modification application SSD 5746 MOD 1, including accompanying letter report dated November 2013, and subsequent letters dated 19 December 2013, 31 January 2014 and 14 April 2014, all prepared by McKenzie Group Consulting (NSW) Pty Ltd

3. Replace all instances of "Director-General" with "Secretary".
4. Insert the following after Condition B2(e):
 - (f) SSD 5746 MOD 1.
5. Replace Condition B5(a) with the following:

Warehouse Building 1 ('Transport Shed') and Warehouse Building 2 ('Logistics Shed'), including office floor space, does not exceed 45,577m²;
6. Insert the following after Condition C5:

B5A. The number of truck movements between the hours of 10:00pm and 5:00am shall be restricted to a maximum of 40.

7. Replace "380,000" with "400,000" in the Total Storage Capacity (kg) column (column 1) of Table 1 in Condition B6.

8. Insert the following after Condition C6:

C6A. Pre-Startup Compliance

Within 3 months of the date of approval of MOD 1, the Applicant must submit, and have approved by the Secretary, a layout plan for the Dangerous Goods storage area. The plan shall show where and how the amended quantity of Dangerous Goods permitted by MOD 1 (refer to Table 1, Condition B6) will be accommodated within the approved Dangerous Goods storage area. The plan shall also demonstrate that compliance will be achieved with the separation and segregation distance requirements contained in the relevant Australian Standards.

9. Insert the following after Condition C10(h):

- (i) the eastern most truck access driveway shall be line marked and sign posted to clearly indicate that this access driveway will permit entry movements only;
- (j) between the hours of 7:00pm and 5:00am, heavy vehicles must only enter and leave the site via the central and eastern most truck access driveways located in Yarrowa Street, Prestons, which serve the new truck and car hardstand area located to the east of Building 1 (the front building) and to the north of Building 2 (the rear building);
- (k) a warning sign is installed at the western most vehicle access point located in Yarrowa Street, warning drivers that trucks must not enter or leave the premises via this driveway between the hours of 7:00pm and 5:00am; and
- (l) appropriate controls and systems, developed in consultation with the EPA and to the satisfaction of the Secretary, are put in place to stop trucks entering or leaving the western most access driveway between the hours of 7:00pm and 5:00am.

10. Inserting the following after Condition C24:

C24A. All drainage grates within the parking and driveway areas are to be mechanically fastened in place through flexible rubber brushes.

11. Deleting the words "*Truck movements restricted to between 5am and 7pm*" from the last row of the third column of Table 2 in Condition C27.

12. Inserting the following after Condition C30(e):

- (f) ensure that the sound power levels of the container handler do not exceed 103dB(A)Leq;
- (g) provide all truck drivers with regular training and instructions in minimising the noise impacts of operating their vehicles;
- (h) ensure that all trucks and delivery vehicles switch off their engines during idle periods or during loading / unloading operations, particularly during the night time hours; and
- (i) ensure that no external public address system is used on site.

13. Inserting the following additional bullet points at D1(h):

- ensure that a 24 contact phone number is made available to the community for the receipt of any complaints;
- make the register of complaints available to the department and Council if requested.

Issue	Assessment	Recommendation
	The department is therefore satisfied that the noise impacts of the modified operation would be minor, can be satisfactorily managed and would comply with the relevant EPA noise criteria, subject to the imposition of a number of additional conditions.	
Hazards and Risk	- The proposed 20,000kg increase in the storage of Class 2.1 dangerous goods on site from 380,000kg to 400,000kg is a minor (5%) increase that would not result in an increased off-site risk or require the modification of the relevant risk and hazard reports. - In addition, Mainfreight have confirmed that it would be able to comply with the requirements contained in the relevant Australian Standards. - The department is satisfied that the proposed modification would not increase the hazards and risks of the proposal, subject to a condition requiring the approval of a plan showing compliance with the separation and segregation distances required by the relevant Australian Standards.	Require the Applicant to: submit a plan demonstrating compliance with the separation and segregation distance requirements for dangerous goods contained within the relevant Australian Standards.
Traffic	- Goodman has confirmed that the purpose of the 24 hour truck access is to provide additional flexibility to Mainfreight's approved operations. - The proposed modification would not result in any additional heavy vehicle movements to those already assessed - i.e. 280 heavy vehicles per day (560 movements). - Goodman advised the EPA that they anticipate that a maximum of 40 heavy vehicle movements would take place between 10:00pm and 5:00am. - These movements would occur during the off-peak traffic period and, given the low numbers, would have a negligible impact on the safety and capacity of the surrounding road network. - The Council did not raise any concerns with traffic impacts resulting from the proposed modification. - The department is satisfied that the proposed modification would have a negligible impact on traffic and can be managed through the existing conditions of consent.	No additional conditions necessary.

6. CONCLUSION

The department has assessed the application in accordance with the requirements in Section 96(1A) and Section 79C of the EP&A Act, and is satisfied that the proposed modification:

- would result in minimal environmental impacts beyond the approved operation;
- is consistent with the original approved development application (SSD 5746) such that the modified facility would be substantially the same development; and
- would allow the tenant to maintain a constant supply of goods to its clients.

Goodman, the EPA and Council have reviewed and accepted the draft conditions.

Consequently, the department is satisfied that the modification is in the public interest and should be approved, subject to conditions.

7. RECOMMENDATION

It is RECOMMENDED that the Acting Director, Industry, Key Sites and Social Projects:

- determine** that the proposed modification is within the scope of Section 96(1A) of the EP&A Act;
- approve** the application subject to conditions; and
- sign** the attached notice of modification (see Tag 'A').

Pascal van de Walle
Planning Officer, Industry



Chris Ritchie
A / Director
Industry, Key Sites and Social Projects

27/5/14

APPENDIX B

Hazardous Chemical Storage Approval

Date: 15 November 2020
Your Ref (Acknowledgement number): NDG023563

s3007476-000009

MAINFREIGHT DISTRIBUTION PTY LIMITED
50 YARRAWA ST
PRESTONS NSW 2170

Dear MAINFREIGHT DISTRIBUTION PTY LIMITED,

RE: Notification of Hazardous Chemicals on Premises

PREMISES: 50 YARRAWA ST, PRESTONS NSW 2170, AUSTRALIA

Please find enclosed your Acknowledgement of Notification for the storage and handling of hazardous chemicals at the above premises. Only storage locations on this site that are above placard quantities are recorded on this notification record.

You must notify SafeWork NSW if you need to amend any of the details on your notification record at least 14 days prior to any changes occurring. These changes include: any significant change to the type, quantity, location or storage of hazardous chemicals, change of contact details (including emergency contacts), or if you no longer occupy the site.

Examples of when to notify us and placard quantities are explained in the *Guidance Material for Notifications for Schedule 11 hazardous chemicals and abandoned tanks*. The guide and link to the online notification form is available on the SafeWork NSW website at www.safework.nsw.gov.au.

For more information on hazardous chemicals legislation, please visit the SafeWork NSW website www.safework.nsw.gov.au or call us on 13 10 50.

Yours sincerely



Fiona Hayman
Operations Manager
Customer Service Centre
SafeWork NSW

15 November 2020

MAINFREIGHT DISTRIBUTION PTY LIMITED

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS CHEMICALS ON PREMISES

ISSUED UNDER AND SUBJECT TO THE PROVISIONS OF THE WORK HEALTH AND SAFETY ACT 2011 AND
REGULATION THEREUNDER

Acknowledgement Number NDG023563

Issued to MAINFREIGHT DISTRIBUTION PTY LIMITED

Trading as

Premises where notified hazardous chemicals are stored/handled

50 YARRAWA ST, PRESTONS NSW 2170, AUSTRALIA

Emergency Contacts for this site:

Andrew Robinson

0294267107

0415766329

Benjamin Robins

0406642902

0406642902

This acknowledgement must be retained as PROOF OF NOTIFICATION
**You must notify SafeWork NSW of applicable changes, specified in the Work Health and Safety
Regulation 2011, to the Hazardous Chemicals used, handled or stored on these premises**

15 November 2020

Issued to MAINFREIGHT DISTRIBUTION PTY LIMITED

Acknowledgement Number NDG023563

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D1	Roofed Store	37640Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
1170	ETHANOL (ETHYL ALCOHOL) or ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)	3	7500Kg	III

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D1	Roofed Store	37640Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
1266	PERFUMERY PRODUCTS with flammable solvents	3	27900Kg	III

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D1	Roofed Store	37640Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
1993	FLAMMABLE LIQUID, , N.O.S.	3	2040Kg	III

15 November 2020

Issued to MAINFREIGHT DISTRIBUTION PTY LIMITED

Acknowledgement Number NDG023563

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D2	Roofed Store	380000Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
1950	AEROSOLS	2	380000Kg	

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D3	Roofed Store	53810Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3017	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC, FLAMMABLE, flash point not less than 23 °C	6.1	20000Kg	III

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D3	Roofed Store	53810Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3018	ORGANOPHOSPHORUS PESTICIDE, LIQUID, TOXIC	6.1	33810Kg	II

15 November 2020

Issued to MAINFREIGHT DISTRIBUTION PTY LIMITED

Acknowledgement Number NDG023563

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D4	Roofed Store	27800Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
2984	HYDROGEN PEROXIDE, AQUEOUS SOLUTION with not less than 8% but less than 20% hydrogen peroxide (stabilized as necessary)	5.1	26355Kg	III

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D4	Roofed Store	27800Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3085	OXIDIZING SOLID, CORROSIVE, N.O.S.	5.1	400Kg	III

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
D4	Roofed Store	2780Kg

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3215	PERSULPHATES, INORGANIC, N.O.S.	5.1	1025Kg	III

15 November 2020

Issued to MAINFREIGHT DISTRIBUTION PTY LIMITED

Acknowledgement Number NDG023563

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
Roofed Storage	Warehouse	5000L
UN Number	Product Name	Class/Division Typical Quantity Packing Group
1719	CAUSTIC ALKALI LIQUID, N.O.S.	8 600L II

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
Roofed Storage	Warehouse	1000L
UN Number	Product Name	Class/Division Typical Quantity Packing Group
1719	CAUSTIC ALKALI LIQUID, N.O.S.	8 100L III

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
Roofed Storage	Warehouse	1000L
UN Number	Product Name	Class/Division Typical Quantity Packing Group
1760	CORROSIVE LIQUID, N.O.S.	8 100L III

15 November 2020

Issued to MAINFREIGHT DISTRIBUTION PTY LIMITED

Acknowledgement Number NDG023563

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
Roofed Storage	Warehouse	1000L

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3267	CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.	8	100L	II

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
Roofed Storage	Warehouse	5000L

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3077	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.	9	1000L	III

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)
Roofed Storage	Warehouse	5000L

UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3481	LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT	9	1000L	III

15 November 2020

Issued to MAINFREIGHT DISTRIBUTION PTY LIMITED

Acknowledgement Number NDG023563

Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)		
Roofed Store	Warehouse	10000Kg		
UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3175	SOLIDS CONTAINING FLAMMABLE LIQUID, N.O.S.	4.1	30000Kg	II
Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)		
Roofed Store	Warehouse	5000Kg		
UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
3249	MEDICINE, SOLID, TOXIC, N.O.S.	6.1	500Kg	III
Storage ID	Storage Type	Maximum Storage Capacity (Kg/L)		
Roofed Store	Warehouse	5000Kg		
UN Number	Product Name	Class/Division	Typical Quantity	Packing Group
2811	TOXIC SOLID, ORGANIC, N.O.S.	6.1	1000Kg	III

APPENDIX C

Bushfire Protection Assessment

BUSHFIRE PROTECTION ASSESSMENT

FOR THE PROPOSED

MAINFREIGHT EXPANSION FACILITY,

PRESTONS DISTRIBUTION CENTRE

26 YARRAWA STREET,

PRESTONS

FOR

GOODMAN PROPERTY SERVICES [AUST] PTY LTD

February 2013.



Australian Bushfire Protection Planners Pty Limited

ACN 083 085 474

RMB 3411 Dog Trap Road

SOMERSBY 2250 NSW

Phone: (02) 43622112 Fax: (02) 43622204

Email: abpp@bigpond.net.au

BUSHFIRE PROTECTION ASSESSMENT

FOR THE PROPOSED

MAINFREIGHT EXPANSION FACILITY,

PRESTONS DISTRIBUTION CENTRE

26 YARRAWA STREET,

PRESTONS

FOR

GOODMAN PROPERTY SERVICES [AUST] PTY LTD

Assessment Number	Document	Preparation Date	Issue Date	Directors Approval
B121914 - 1	Final	12.1.2013	10.2.2013	<i>G.L.Swain</i>

EXECUTIVE SUMMARY

Australian Bushfire Protection Planners Pty Limited, at the request of *Goodman Property Services [Aust] Pty Ltd* has undertaken the bushfire consultancy to inform the planning for the expansion of the Prestons Distribution Centre on Yarrowa Street, Prestons of those matters which are necessary to address the bushfire risk to the facility.

In addition, as the Mainfreight Distribution Centre expansion is proposed to include the storage of Dangerous Goods the development is classified as a Major Hazards Facility within the definition of the *Occupational Health and Safety Regulation 2001* and is therefore deemed to be a State Significant Development [SSD] under Schedule 1 of *State Environmental Planning Policy [State and Regional Development] 2011*.

The site on which it is proposed to construct the extension to the Prestons Distribution Centre is owned by Goodman Industrial Australia Fund and managed by Goodman Property Services (Aust) Pty Ltd. The land is identified as Lot 2 DP 28729, Lot 102 DP 1117691 Yarrowa Street, Prestons, commonly known as 26 Yarrowa Street.

Total site area is 3.6 hectares and the land is within the Liverpool Local Government area.

The development area has been previously disturbed by past agricultural activities and, more recently, the development of an adjoining warehousing distribution facility.

Two detention basins exist within the northwest portion of the site while the remainder exists as grassland interspersed with small stands of bush and a scattering of individual trees.

An existing 50 metre wide TransGrid easement traverses across the northeast portion of Lot 2. The easement is associated with the sub-station located on the northern side of Yarrowa Street, opposite the site, and accommodates a high capacity tower positioned across the boundary of Lot 2 and adjoining lot to the east.

The development area forms part of a larger industrial estate owned by Goodman, in which there are three (3) sites. At the time of this application, only Site 1 has been developed and comprises the Mainfreight Distribution Centre. The area that is the subject of this application is identified as Site 2 and is located immediately east of the Mainfreight facility.

Site 3 lies to the south of Sites 1 and 2, with frontage to Yarrunga Street, and is subject to a separate application lodged by Southern Logistics.

Lot 2 in DP 28729 is recorded on the Liverpool Council Bushfire Prone Land Map as containing part of the 100 metre wide buffer zone to Category 1 Bushfire Prone Vegetation identified within Lot 11 in DP 1053060 which is located to the east of the Site 2 development precinct.

The NSW Department of Planning [DoP] has issued the Director General's Requirements [DGRs] for the preparation of the Environmental Assessment for the project [SSD – 5746 dated 1.2.2013].

The Director-General's requirements for the Environmental Assessment contain no specific bushfire protection requirements for the proposed development.

However, the Liverpool City Council's Bushfire Prone Land Map indicates that the eastern side of the site contains the buffer zone to Category 1 Bushfire Prone Vegetation within the property to the east.

Therefore, this report undertakes an assessment to examine the measures required to minimise bushfire risk on the proposed development and determines the deemed-to-satisfy bushfire protection requirements in accordance with the provisions of *Planning for Bushfire Protection 2006*, and provides recommendations on the provision of Asset Protection Zones [Defendable Spaces] to the proposed building.

This Bushfire Protection Assessment undertakes an assessment of the bushfire protection measures required to address the bushfire risk to the extension to the Mainfreight Distribution facility on the site, consistent with the specifications of *Planning for Bushfire Protection 2006*, and provides a suite of site specific recommendations that address the outcome of the standards regarding setbacks [defendable space], provision of water supply, fuel management protocols and other matters considered necessary to mitigate the potential bushfire threat to persons, property and the environment from the danger that may arise from a bushfire within the vegetation on the vacant land to the east of the Goodman site.

The characteristics of the site as discussed in this report, together with the recommendations contained in this assessment, provide that the site is suitable in terms of its intended use.



Graham Swain
Managing Director,
Australian Bushfire Protection Planners Pty Limited.

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SECTION 1

INTRODUCTION

1.1 Development Proposal.

Australian Bushfire Protection Planners Pty Limited, at the request of *McKenzie Group Consulting Planning [NSW] Pty Ltd*, on behalf of *Goodman Property Services [Aust] Pty Ltd*, has undertaken the bushfire consultancy to inform the Development Application for the proposed extension to the Prestons Distribution Centre of those matters relating to the protection of the facility against potential bushfire impact.

Due to the facility storing Hazardous Materials the development is deemed to be a State Significant Development under Schedule 1 of *State Environmental Planning Policy [State and Regional Development] 2011*.

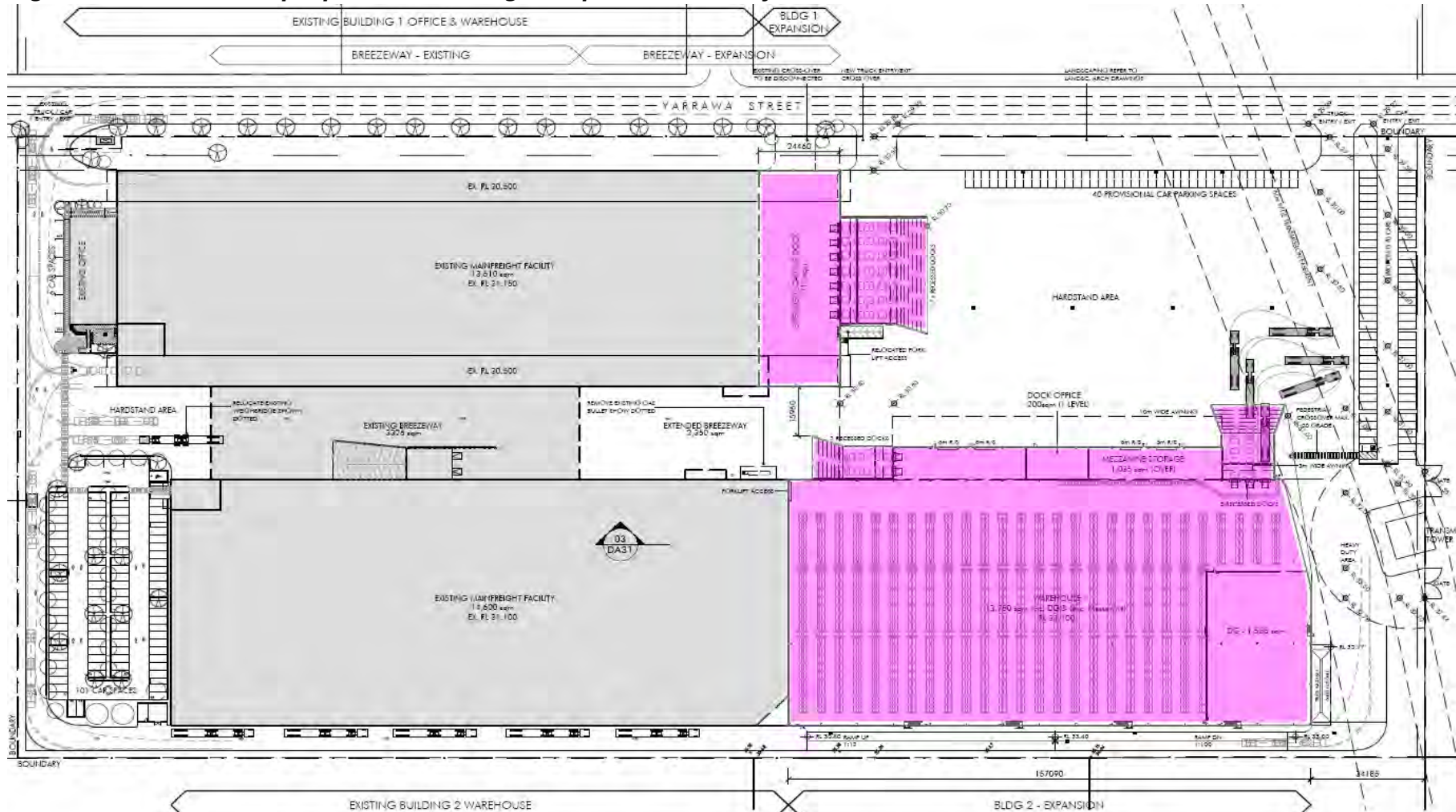
The site on which it is proposed to construct the extension to the Prestons Distribution Centre is owned by Goodman Industrial Australia Fund and managed by Goodman Property Services (Aust) Pty Ltd. The land is identified as Lot 2 DP 28729, Lot 102 DP 1117691 Yarrowa Street, Prestons, commonly known as 26 Yarrowa Street.

The proposed development includes the relocation of the existing Weighbridge; an extension to the existing Mainfreight Facility [north] Loading Dock and a 13,260m² Warehouse extension to the Mainfreight Facility [south].

This extension includes a Mezzanine Storage, Loading Docks and Dock Office.

External works include driveways, truck/car parking and hardstand area – refer to Figure 1 – Site Plan.

Figure 1 – Site Plan of proposed Mainfreight Expansion Facility, Prestons Distribution Centre.



1.2 Aim of this Report.

The aim of this report is to prepare a bushfire protection assessment for the project to address the aim and objectives of *Planning for Bushfire Protection 2006*.

1.3 Statutory Requirements.

This report has been prepared having regard to the following legislative and planning requirements:

1.3.1 Legislation.

Environmental Planning and Assessment Act - 1979 (EPA Act)

Planning and development within NSW is regulated by the *Environmental Planning & Assessment Act, 1979* (EPA Act). The *Environmental Planning and Assessment Amendment [Part 3A Repeal] Act 2011* commenced on the 1st October 2011 and amends the *Environmental Planning & Assessment Act 1979*.

These amendments include the repeal of Part 3A 'major projects' and introduces a new assessment pathway for under Part 4 of the Act for State Significant Development [SSD].

State Environmental Planning Policy [State and Regional Development] 2011 [SRD SEPP] was introduced on the 1st October 2011 and declares certain development to be SSD. The Minister for Planning and Infrastructure may also declare development to be SSD by an order.

SSD requires lodgement of a development application, including submission of an environmental impact statement which addresses the Director General's Requirements [DGRs].

The Director General's Requirements [DGRs] do not contain matters pertaining to bushfire protection. This report nevertheless examines the bushfire protection requirements to address any potential risk from the bushfire prone vegetation on the land to the east of the site.

1.3.2 Planning Policies.

Planning for Bushfire Protection – 2006. [Rural Fire Service]

This document provides guidance on the planning and development control processes in relation to bushfire protection measures for rural residential and residential subdivision, "*Special Fire Protection Purpose Development*" and Class 5 – 8 and 10 buildings in bushfire prone areas.

The document provides deemed-to-satisfy specifications on the provision of Asset Protection Zones to residential and “*Special Fire Protection Purpose Developments*”; defensible space requirements to Class 5 – 8 & 10 developments and access/water supply provisions for developments in bushfire prone areas [industrial buildings are Class 7 as defined by the Building Code of Australia (BCA)].

Provision for the assessment of construction standards to buildings and management / maintenance of the Asset Protection Zones/defensible space to buildings is provided under the BCA.

1.4 Documentation reviewed in this Assessment.

To achieve the aim of this report, a review of information relevant to the property was undertaken. Information sources reviewed included the following documents:

- Director General Requirements issued on the 1.2.2013 – State Significant Development – SSD - 5746;
- Site Plan of proposed Mainfreight Expansion Facility prepared by Nettletontribe – January 2013;
- *Planning for Bushfire Protection 2006* prepared by the NSW Rural Fire Service/Planning N.S.W;
- Australian Standard AS3959 *Construction of Buildings in Bushfire Prone Areas*;
- *Rural Fires Regulation 2008*;
- Liverpool City Council *Certified Bushfire Prone Land Map*.

1.5 Site Inspection.

Graham Swain of ***Australian Bushfire Protection Planners Pty Limited*** inspected the development site on the 3rd of December 2012 to assess the topography, gradients of the land within and external to the site and vegetation classification within and adjoining the development property, existing bushfire mitigation measures and a visual assessment of bushfire threat.

The land adjoining the development site was also inspected to determine the surrounding land use / land management practices and extent of bushfire prone vegetation.

1.6 Authority Consultation.

The DGRs do not specifically require consultation with the NSW Rural Fire Service in order to obtain advice on bushfire protection measures to the development. Therefore, the recommendations provided in this report are drawn from the NSW Rural Fire Service's *Planning for Bushfire Protection 2006*.

SECTION 2

PROPERTY DESCRIPTION

2.1 Location.

The development site occupies Lot 2 in DP 28729 and Lot 102 in DP 1117691, Yarrowa Street, Prestons and is located in the Local Government Area of Liverpool City Council.

Figure 2 – Location of Development Site.



2.2 Existing Land Use.

The development area consists of vacant land which has been previously disturbed by past agricultural activities. Two detention basins exist within the northwest portion of the site while the remainder exists as grassland interspersed with small stands of bush and a scattering of individual trees.

An existing 50-metre wide TransGrid easement traverses across the northeast portion of Lot 2. The easement is associated with the sub-station located on the northern side of Yarrowa Street, opposite the site, and accommodates a high capacity tower positioned across the boundary of Lot 2 and adjoining lot to the east.

2.3 Surrounding Land Use.

The landuse adjoining the boundaries of the development site is as follows:

(a) North

To the north of Yarrowa Street to land contains the Liverpool Electrical Substation operated by Transgrid.

(b) East

The land to the east is vacant, part of which contains a small area of vegetation mapped as Category 1 Bushfire Prone Vegetation.

(c) South

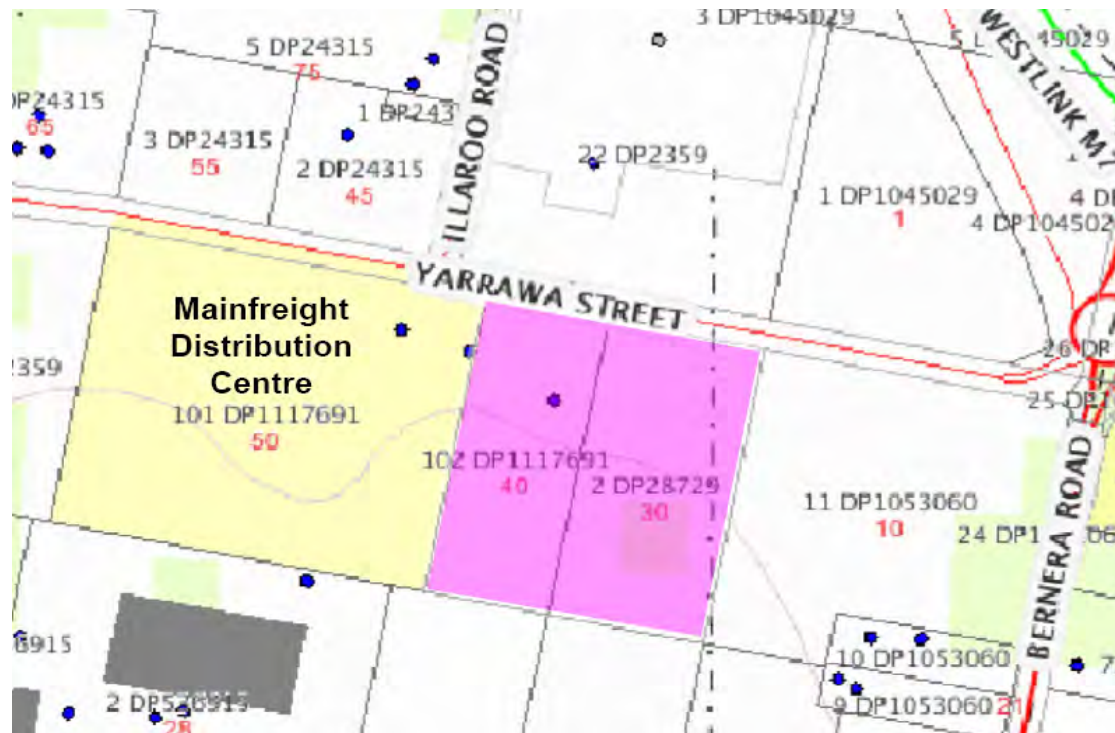
To the south of the site the vacant land forms Goodman's Site 3 development precinct with frontage to Yarrunga Street and is subject to a separate application lodged by Southern Logistics.

Figure 3 – Aerial Photograph of Site showing adjoining landuse



Source – SixViewer

Figure 4 – Cadastre Plan showing the location of the development site and adjoining lots.



2.4 Topography.

Appendix 2 of *Planning for Bushfire Protection 2006* states that slopes should be assessed, over a distance of at least 100m from a development site and that the gradient of the land should be determined which will most significantly influence the fire behaviour on the site.

➤ **Within the Development Site.**

The landform within the development site consists of the northern slope of a broad ridgeline which falls to the north at 2 degrees.

➤ **Beyond the Development Site.**

(a) North.

The topography of the land to the north of the development site, beyond Yarrawa Street, falls at less than 2 degrees to the north across the land occupied by the Ausgrid Substation.

(b) East.

The topography of the land to the east of the development site falls to the north at less than 2 degrees and is level to the east.

(c) South.

The topography of the land to the south of the development site rises at 2 – 3 degrees to the south across the adjoining vacant land.

(d) West.

The topography of the land to the west of the development site is level.

2.5 Vegetation.

Appendix A2.3 of *Planning for Bushfire Protection 2006* provides a methodology for determining the predominant bushfire prone vegetation for at least 140 metres in all directions from the buildings. Vegetation is classified using Table A2.1 of *Planning for Bushfire Protection 2006*, which classifies vegetation types into the following groups:

- (a) *Forests [wet & dry sclerophyll forests];*
- (b) *Woodlands;*
- (c) *Plantations – being pine plantations not native plantations;*
- (d) *Forested Wetlands;*
- (e) *Tall Heaths;*
- (f) *Freshwater Heaths;*
- (g) *Short Heaths;*
- (h) *Alpine Complex;*
- (i) *Semi – arid Woodlands;*
- (j) *Arid Woodlands; and*
- (k) *Rainforests.*

2.5.1 Vegetation within the Development Site.

The development site contains pasture grass.

2.5.2 Vegetation within 140 metres of the Development Site.

(a) North.

The land to the north contains grass on the land surrounding the Ausgrid Substation site.

(b) East.

The adjoining vacant land contains grass extending into a corridor of woodland vegetation located within the eastern portion of Lot 11 in DP 1053060.

(c) South.

The vacant land to the south contains grassland vegetation which is managed.

(d) West.

The existing Mainfreight Distribution Centre contains managed landscaped gardens.

2.6 Significant Environmental Features within the Development Site.

The development site does not contain significant environmental features such as SEPP 44 Koala Habitat; SEPP 14 Wetlands; SEPP 26 Littoral Rainforests; land slip areas or National Parks Estate or areas of geological interest or riparian corridors.

2.7 Known Threatened Species, Population or Ecological Community on the Site.

There are no known threatened species within the development site.

2.8 Details and location of Aboriginal Relics or Aboriginal Place.

There are no known Aboriginal relics or Aboriginal places on the development site.

SECTION 3

FIRE MANAGEMENT RESPONSIBILITIES

Fire management within the development site is the responsibility of:

3.1 Liverpool City Council.

Liverpool City Council has responsibility, under Section 66 of the *Rural Fires Act*, to issue a notice in writing requiring an owner / occupier of any land within the LGA to carry out bushfire hazard reduction works on that land. Section 100E of the *Rural Fires Act* requires Council to issue bushfire hazard Reduction certificates for hazard reduction to be undertaken on private lands.

3.2 New South Wales Rural Fire Service.

The NSW Rural Fire Service (RFS) has the responsibility for undertaking fire suppression activities, hazard management activities and other functions relative to emergency management, within its areas of operation. *Section 73* of the *Rural Fires Act (1997)* enables the Commissioner to carry out bush fire hazard reduction works on any land as required by a bush fire risk management plan if the work has not been carried out satisfactorily. Incurred costs can be recovered as a debt owed to the Crown.

3.3 Fire & Rescue New South Wales.

The Fire & Rescue NSW has the responsibility for undertaking fire suppression activities, and other functions relative to emergency management, within its area of operation and through Mutual Aid Agreements, provide assistance to the NSW Rural Fire Service, particularly for structural fire operations within the NSW Rural Fire Brigade Districts. Hazmat management within New South Wales is the responsibility of the Fire & Rescue NSW.

3.4 Liverpool Bush Fire Management Committee.

The Liverpool Bushfire Management Committee has the responsibility for planning for co-ordinated fire fighting activities / hazard management activities on a local government level. It is not an operational organization, a fire fighting organization or a funding source for fire management activities.

The Bush Fire Management Committee is supported by the following provisions of the Rural Fires Act 1997:

- **Section 52** requires each Bush Fire Management Committee to prepare a draft bush fire management plan for their local areas which includes a plan of operations and a bush fire risk management plan.
- **Section 54** of the Act specifies that a draft bush fire risk management plan is to 'set out schemes for the reduction of bush fire hazards in the rural fire district or other part of the State'.

A draft bush fire risk management plan may also restrict or prohibit the use of fire or other fire hazard reduction activities in all or specified circumstances or places to which the plan applies.

3.5 Public Authorities & owners/occupiers of land.

The Rural Fires Act, 1997 provides several legislative opportunities to require Public Authorities, land owners and occupiers to manage hazardous fuels. These are listed below:

- **Section 63(1)** states that it is the duty of a public authority to take any practicable steps to prevent the occurrence of bushfires on, and to minimise the danger of the spread of a bushfire on or from:
 - (a) any land vested in or under its control or management, or*
 - (b) any highway, road, street, land or thoroughfare, the maintenance of which is charged on the authority.*
- **Section 63(2)** states that *'it is the duty of the owner or occupier of land to take the notified steps (if any) and any other practicable steps to prevent the occurrence of fires on, and to minimise the danger of the spread of fires on or from that land'.*
- **Section 65A** states that the *'Commissioner may nominate a member of the Service as a hazard management officer'.*
- **Section 65(2)** states that *'an authorised person may, with the permission of the fire fighting authority or other authority responsible for unoccupied Crown land or managed land or a person nominated by the authority to give such permission, enter the land and carry out bushfire hazard reduction work with the assistance of such other persons as the authorised person considers to be necessary for the purpose'.*
- **Section 65(3)** states that *'the authority responsible for unoccupied Crown land or managed land is to be taken to have given the permission under this section to the extent necessary to give effect to a bushfire risk management plan'.*
- **Section 65(4)** states that *'if permission under this section is given subject to conditions, the conditions must be complied with'.*
- **Section 66(1)** states that *'a hazard management officer may, by notice in writing, require the owner or occupier [not being a public authority] of any land to carry out bushfire hazard reduction work specified in the notice on the land'.*

- **Section 66(2)** states that *'a hazard management officer must serve a notice under this section if required to do so by a bushfire risk management plan applicable to the land that is in force'*.
- **Section 66(3)** states that *'a hazard management officer must issue a bushfire hazard reduction certificate in respect of any bushfire hazard reduction work required by a notice issued in accordance within section (2)'*.
- **Section 66(6)** states that *'the requirements and conditions so specified must include any requirements in a bushfire risk management plan that is applicable to the land and is in force and may include a requirement or condition that the burning of fire breaks or of combustible material;*
(a) must in fire district constituted under the Fire Brigades Act 1989 be carried out by or under the supervision of the fire brigade or an officer in charge of the fire brigade;
(b) must outside a fire district, be carried out by or under the supervision of the rural fire brigade specified in the notice or an appropriate officer of the rural fire brigade or any hazard management officer.
- **Section 66(7)** states that *'a notice requiring the establishment of a firebreak cannot require an occupier or owner to kill or remove any trees that are reasonably necessary for shade, shelter, windbreak or fodder purposes or the protection of threatened species, populations, ecological communities or critical habitats within the meaning of the 'Threatened Species Conservation Act 1995'.*
- **Section 66(8)** states that *'an occupier or owner to whom a bushfire hazard reduction notice is given must, despite the fact that a fire permit has not been granted under Division 5, comply with the requirements specified in the notice'*.
- **Section 70(2)** states that *'if within the time specified in the relevant notice the owner or occupier to whom it is given fails to comply with any requirement of the notice, the Commissioner may, without prejudice to liability of the owner or occupier, enter on the land and carry out the bushfire hazard reduction work the owner or occupier was required to do under the notice'*.
- **Section 70(3)** states that *'any costs incurred by the Commissioner in carrying out such work may be recovered from the owner or occupier of the land as a debt due to the Crown in a court of competent jurisdiction'*.
- **Section 87** allows the removal of hazards in the bush fire danger period by the provision of a permit system. The permits are valid for 21 days, excluding TOBAN [Total Fire Ban] days.

Section 10 permits are not required to adhere to *Part V* provisions of the EPA Act 1979 in the assessment of impact, except for public authorities. An owner/occupier of private land must obtain from the NSW Rural Fire Service, a bushfire hazard reduction certificate before undertaking hazard reduction works on that land (Section 100E of the *Rural Fires Act 1997*).

3.6 Bushfire Hazard Management within the Development Site.

The management of the landscaped gardens and the vegetation within the development site will remain the responsibility of the property owner.

A Positive Covenant, created under the provisions of the *Conveyancing Act of 1919*, shall be placed on the title of the land to ensure compliance with the management prescriptions for the Defendable Spaces detailed in this report [Refer to Section 5.7].

PRECINCT LEVEL ASSESSMENT

Section 146 of the *Environmental Planning & Assessment Act 1979* requires councils, where a Bushfire Risk Management Plan applies, to prepare a Bushfire Prone Land Map in consultation with the Commissioner of the NSW Rural Fire Service. The Commissioner will designate lands to be Bushfire Prone within an area and, when satisfied that the lands have been recorded on a map, will certify the map as a Bushfire Prone Land Map for the purposes of this or any other Act.

[illegible]

 BFPL Vegetation Category 1
 BFPL Vegetation Category 2
 BFPL Vegetation Buffer -100m & 30M

The Liverpool Bushfire Prone Land Map shows that the site is not impacted by bushfire prone vegetation however the buffer zone to the Category 1 Bushfire Prone Vegetation on the land to the east impacts Lot 2 in DP 28729.

The site inspection confirmed the accuracy of the Liverpool Bushfire Prone Land Map.

SECTION 5

BUSHFIRE PROTECTION ASSESSMENT

5.1 Introduction.

Planning for Bushfire Protection 2006 provides deemed-to-satisfy fire protection measures for residential development [Class 1, 2 & 3 buildings]; “Special Fire Protection Developments [Hospitals, Nursing Homes / Retirement Villages / Schools / Childcare Centres & Tourist Accommodation]; Industrial / Commercial Development and residential and Special Fire Protection “infill” development.

In reference to the construction of the proposed extension to the Main Freight Distribution Centre the building is classified as a Class 7 building as defined by the Building Code of Australia [BCA].

Chapter 1, Section 1.3 of *Planning for Bushfire Protection 2006* states that the construction of Class 5 – 10 buildings on bushfire prone land, or land impacted by bushfire prone vegetation, must meet the aim and objectives of the document.

Chapter 4, Section 4.3.6(f) discusses the bushfire protection to buildings of Class 5 to 8 and 10b of the Building Code of Australia and states:

“The Building Code of Australia does not provide for any bushfire specific performance requirements and as such AS 3959 -1999 does not apply as a set of “deemed-to-satisfy” provisions.

The general fire safety construction provisions [of the BCA] are taken as acceptable solutions, but the aim and objectives of Planning for Bushfire Protection 2006 apply in relation to other matters such as access, water and services, emergency planning and landscaping/vegetation management”.

“Where the aim and objectives of PfPFP [Section 1.1] are not met, then the construction requirements for bushfire protection will need to be considered on a case-by-case basis”.

“In many cases, these types of developments will require on-site parking and loading areas. In such cases, it is prudent to place these facilities in the most appropriate location in order to establish defensible space for fire-fighting purpose”.

The objectives of *Planning for Bushfire Protection 2006* are:

- (i) Afford occupants of any building adequate protection from exposure to a bushfire;
- (ii) Provide for a defensible space to be located around buildings;
- (iii) Provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent direct flame contact and material ignition;
- (iv) Ensure that safe operational access and egress for emergency service personnel and residents is available;
- (v) Provide for ongoing management and maintenance of bushfire protection measures, including fuel loads in the asset protection zones;
and
- (vi) Ensure that utility services are adequate to meet the needs of fire-fighters and others assisting in bushfire fighting.

The document identifies six core bushfire protection requirements. These are:

- Provision of Asset Protection Zones / Defensible Spaces in accordance with the specific landuse, the predominant bushfire prone vegetation type within 140 metres of the development and the topography of the land containing the bushfire prone vegetation;
- Access for fire fighting operations;
- Water Supplies for fire fighting operations;
- Construction standards of buildings located within 100 metres of the bushfire hazard interface, dependant on specification landuse, the predominant bushfire prone vegetation type within 140 metres of the development and the topography of the land containing the bushfire prone vegetation;
- Emergency Planning;
- Landscape Management – in particular the management of the Asset Protection Zones / Defensible Spaces and residual bushfire prone vegetation.

Planning for Bushfire Protection 2006 provides a methodology to determine the Asset Protection Zones [defensible space] and Bushfire Attack [Construction Standards] required for **habitable buildings** in development for **residential purposes** that are designated as bushfire prone.

The document does not provide deemed to satisfy solutions for Class 5 – 10 buildings constructed in bushfire prone areas but states that where the aim and objectives of the document are not met, then the construction requirements for bushfire protection will need to be considered on a case by case basis.

Sections 5.2 and 5.3 of this report examine the Site Plan layout and the location of the proposed building in relation to the provision of a suitable “defendable space” between the bushfire hazard and the proposed building and the protection against the potential impacts of a future fire occurrence in the vegetation on the land to the east of the development site and examines recommendations on the bushfire protection measures required to be implemented to mitigate the potential bushfire threat.

The provision of access and water supplies for fire-fighting operations, management of the defendable space [Asset Protection Zone] and evacuation planning are examined in Sections 5.4 – 5.9 of this report.

5.2 The provision of Defendable Space/s [Asset Protection Zones].

Appendix 2 of *Planning for Bushfire Protection 2006* provides the following procedure for determining setback distances (Asset Protection Zones) for **residential development** in bushfire prone areas:

- (a) *Determine vegetation formations as follows:*
 - Identify vegetation in all directions from the site for a distance of 140 metres;
 - Consult Table A2.1 to determine the predominant vegetation type; and
 - Select the predominant vegetation formation as described in Table A2.1.
- (b) *Determine the effective slope of the land under the predominant vegetation Class.*
- (c) *Determine the appropriate fire [weather] area in Table A2.2.*
- (d) *Consult Table A2.3 and determine the appropriate setback [APZ] for the assessed land use, vegetation formation and slope range.*

The methodology does not determine the requisite Defendable Space requirements for Class 5 – 10 developments as defined by the Building Code of Australia [BCA].

Table 1 examines the width of defendable space requirements based on the widths required to provide a separation distance which is sufficient to minimise flame contact with the building and to provide a fire-fighting platform wide enough to permit the safe extinguishment of a bushfire, after the fire front has passed.

Table 1. Determination of Defendable Space to the proposed building. Fire Danger Index [FDI] for the site is 100

Aspect	Vegetation within 140m of development	Predominant Vegetation Formation Class [Table A2.1 Planning for Bushfire Protection 2006]	Effective Slope of Land for 100 metres from building	Flame Zone width determined by calculation	Available width of Defendable Space to proposed building
North	Grassland within the Ausgrid Substation site	Nil classification for grassland on Ausgrid Substation site. Nil vegetation within hardstand area on development site	< 2 degrees downslope to the north	7 metre setback for grassland vegetation	Defendable Space of more than 120m to grassland vegetation on Ausgrid Substation site.
East	Grassland extending into woodland on the adjoining land to the east.	Nil classification for grassland vegetation; Woodland	Level to the east [runs with the contours]' < 2 degrees downslope to the northeast	15 metres for woodland vegetation; 7 metres for grassland vegetation	Defendable Space of minimum 34 metres to the east of the building provided by building line setback requirements
South	Grassland on Goodman's land	Nil Classification	< 2 degrees upslope to the south	6 metres setback for grassland vegetation	Defendable Space of more than 10 metres to the south of the building provided by building line setback from the southern lot boundary
West	Landscaped gardens	Nil Classification	Level	None required	None required

Note:

The assessment to determine the defendable space setback to the proposed building has found that, based on the existing vegetation communities on the land adjoining the development site, the minimum width of defendable space is provided and that the building will not be subject of flame contact – as required by the NSW Rural Fire Service.

5.3 Construction Measures to Buildings.

Table 1 identifies that the minimum Defendable Space width required between the building and the bushfire prone vegetation on the land to the east is 7 metres for grassland fuels and 15 metres for woodland fuels in order to prevent flame contact on the building.

The actual separation distance is > 34 metres from the eastern boundary of the development site to the building with the separation to the woodland vegetation on the adjoining land being an additional 70 metres from the eastern boundary of the development site – i.e. a total of 105 metres from the woodland vegetation to the eastern wall of the building.

This separation width is beyond the maximum 100 metre separation used to determine construction standards to buildings in bushfire prone areas. The separation to the grassland vegetation to the north also exceeds the 100 metre maximum.

The 10 metre wide setback to the existing grassland vegetation on the land to the south requires that the southern wall of the extension be constructed to comply with BAL 12.5, pursuant to A.S. 3959 – 2009. However, the site to the south is subject to a development proposal which will remove the grassland hazard to the south.

Therefore, there is no requirement for the application of bushfire construction standards to the proposed extensions.

5.4 Access Standards for Firefighting Operations.

Chapter 4, Section 4.2 “Access” of *Planning for Bushfire Protection 2006* provides specifications on the access provisions for fire-fighting operations within developments which are subject to bushfire attack.

Vehicular access to the proposed extension will be constructed to provide heavy rigid and articulated vehicle access to the proposed building, providing suitable access for fire-fighting appliances similar to NSW Rural Fire Service Category 1 Tankers and NSW FB Composite and Aerial Appliances.

5.5 Water Supplies for Firefighting Operations.

A reticulated water supply for potable water supply and fire hydrants is to be extended into the site from the existing main in Yarrawa Street. The new extension will be required to address water storage for structural fire suppression and will therefore include onsite static water supply tanks for fire-fighting operations.

The fire-fighting water supply to the new buildings shall comply with the Building Code of Australia [BCA] and A.S. 2419.1 – 2005.

5.6 Emergency Management for Fire Protection / Evacuation.

Due to the low bushfire risk to the proposed extension there is no requirement for the preparation of a specific Bushfire Evacuation Plan or a Bushfire Management Plan.

5.7 Bushfire Hazard Management.

The intention of bushfire hazard management is to prevent flame contact with a structure, reduce radiant heat to below the ignition thresholds for various elements of a building, to minimize the potential for wind driven embers to cause ignition and to reduce the effects of smoke on occupants and fire-fighters.

The management of the landscaped gardens and the site generally shall comply with the recommendations of Appendix A5.4 & Appendix A5.5 of *Planning for Bushfire Protection 2006* and *Standards for Asset Protection Zones*.

Management of the landscaped gardens shall comply with the following:

- Maintain a clear area of low cut lawn or pavement adjacent to the buildings; Utilise non-flammable materials such as Scoria, pebbles and recycled crushed bricks as ground cover to landscaped gardens in close proximity to building;
- Keep areas under shrubs and trees raked and clear of combustible fuels;
- Trees and shrubs should be maintained in such a manner that tree canopies are separated by 2 metres and understorey vegetation is not continuous [retained as clumps].

SECTION 6

BUSHFIRE MANAGEMENT STRATEGIES

Strategies to mitigate the potential bushfire risk to the proposed extension to the Main Freight Distribution Centre are as follows:

6.1 Strategy 1 – Defendable Space Requirements

Table 2. Minimum Defendable Space to the proposed extension

Aspect	Predominant Vegetation Formation Class [Table A2.1 Planning for Bushfire Protection 2006]	Effective Slope of Land for 100 metres from building	Minimum width of Defendable Space [Flame Zone width determined by calculation]	Available width of Defendable Space to proposed building
North	Nil classification for grassland on Ausgrid Substation site. Nil vegetation within hardstand area on development site	< 2 degrees downslope to the north	Minimum 7 metre setback for grassland vegetation	Defendable Space of more than 120m to grassland vegetation on Ausgrid Substation site.
East	Nil classification for grassland vegetation; Woodland on the land to the east	Level to the east [runs with the contours] < 2 degrees downslope to the northeast	Minimum 15 metres for woodland vegetation; Minimum 7 metres for grassland vegetation	Defendable Space of minimum 34 metres to the east of the building provided by building line setback requirements; > 105 metre separation to the woodland vegetation on the land to the east

6.2 Strategy 2 – Defendable Space [landscape] management requirements

Management of the defendable spaces/landscaped areas within the development site shall comply with the following:

- Maintain a clear area of low cut lawn or pavement adjacent to the building;
- Keep areas under shrubs and trees raked and clear of combustible fuels;
- Utilise non-flammable materials such as Scoria, pebbles and recycled crushed bricks as ground cover to landscaped gardens in close proximity to building;
- Trees and shrubs should be maintained in such a manner that tree canopies are separated by 2 metres and understorey vegetation is not continuous [retained as clumps];

6.3 Strategy 3 – Water Supplies for Firefighting Operations:

The fire-fighting water supply to the proposed building shall comply with the Building Code of Australia [BCA] and Australian Standard A.S. 2419.1 – 2005.

SECTION 7

CONCLUSION

An approval is being sought for the construction of an extension to the Mainfreight Distribution Facility on Yarrawa Street Prestons.

Mainfreight Distribution Centre expansion is proposed to include the storage of Dangerous Goods and therefore the development is classified as a Major Hazards Facility within the definition of the *Occupational Health and Safety Regulation 2001* and is deemed to be a State Significant Development [SSD] under Schedule 1 of *State Environmental Planning Policy [State and Regional Development] 2011*.

The Director General's Requirements [DGRs] issued under SSD – 5746 on the 1.2.2013 for the preparation of the Environmental Assessment for the project do not include specific bushfire protection requirements, however the Liverpool Bushfire Prone Land Map records the site as containing the buffer zone to the Category 1 Bushfire Prone Vegetation located on the property to the east of the development site.

This report has reviewed the proposed development against the deemed-to-satisfy provisions of *Planning for Bushfire Protection 2006* and found that the location of the building provides a defensible space between the building and the bushfire prone vegetation on the land to the east.

The defensible space setback width exceeds the 'flame zone' width required to address the NSW Rural Fire Service's requirements for Class 5 – 10 buildings [as defined by the Building Code of Australia].

Table 3 summarises the extent to which the proposed development conforms to the deemed-to-satisfy specifications of *Planning for Bushfire Protection 2006*.

Table 3. Compliance with the deemed-to-satisfy provisions of *Planning for Bushfire Protection 2006*.

Bushfire Protection Measure	Compliance with deemed-to-satisfy provisions of <i>Planning for Bushfire Protection 2006</i>.
Asset Protection Zone/Defendable Space setbacks	YES – widths of the Defendable Spaces to the proposed Class 7 Building exceed the minimum 'flame zone' setback width required by the NSW Rural Fire Service.
The siting and adequacy of water supplies for fire fighting	YES – Hydrant supply to be installed in accordance with AS 2419.2 – additional on site static fire-fighting water supply to be provided in accordance with BCA requirements.
Design of Public Roads	YES – Proposed internal access roads comply with the specifications of Section 4.1.3(1) of <i>Planning for Bushfire Protection 2006</i> and provide satisfactory emergency access for fire-fighting appliances.
Design of Fire Trail network	No Fire network required.
Adequacy of emergency response access and egress	YES – Existing and proposed road network provides safe, two-way access/egress for emergency service vehicles.
Adequacy of bushfire maintenance plans and fire emergency procedures	A Fire Management Plan and bushfire emergency procedures are not required for the development due to the low bushfire risk.
Building construction standards	Bushfire construction standards to the proposed extension are not required.
Adequacy of sprinkler systems and other fire protection measures to be incorporated into the development	Bushfire Sprinkler Systems not applicable. BCA fire protection measures to be implemented including hydrant supply, booster system and static water supply for fire-fighting operations.
Emergency Management	No specific Bushfire Evacuation Plan is required due to low bushfire risk.

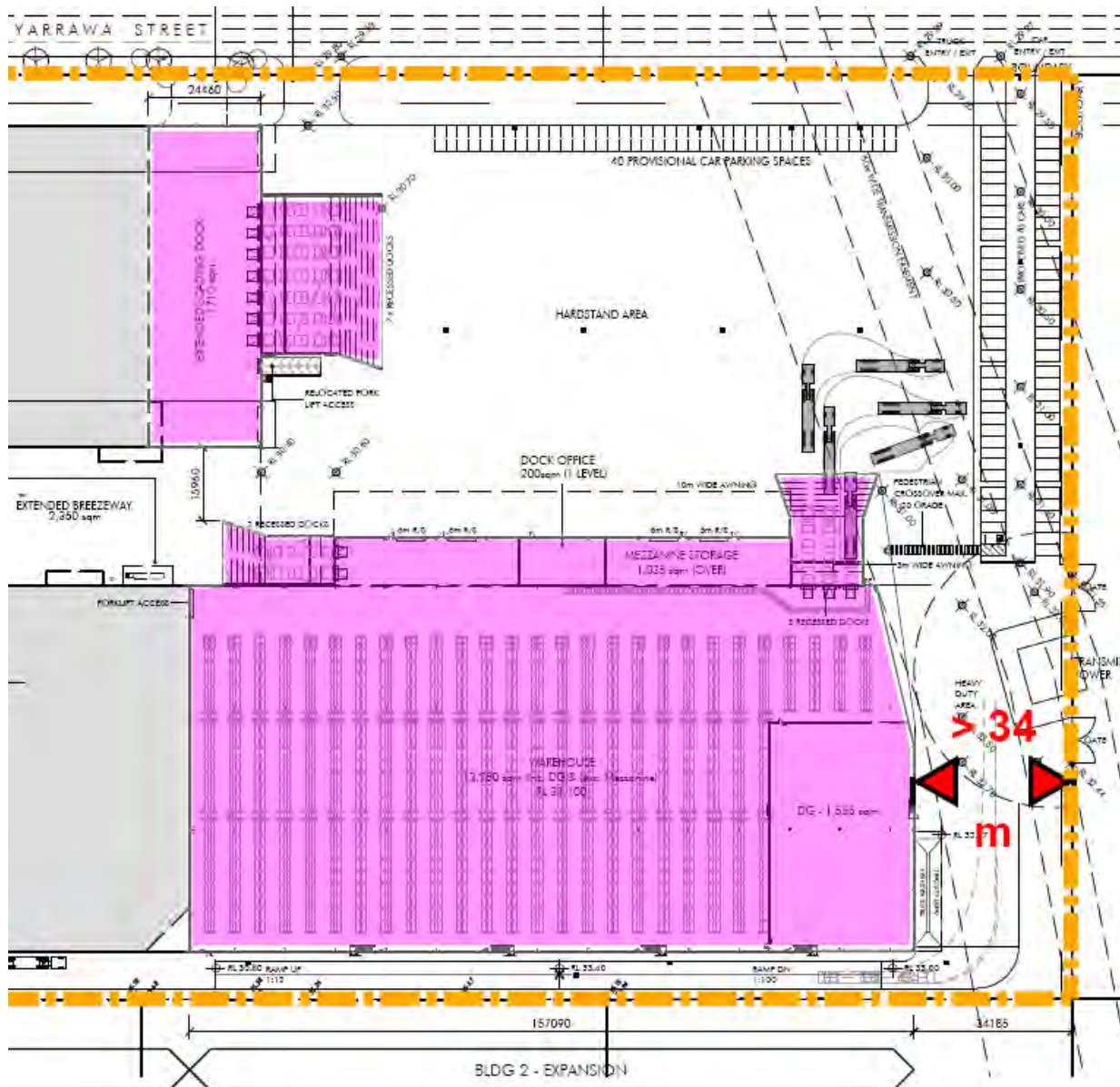


Graham Swain,
Managing Director,
Australian Bushfire Protection Planners Pty Limited.

REFERENCES:

- Director General's Requirements [DGRs] – SSD – 5746 issued on the 1.2.2013;
- N.S.W Rural Fire Service – *Planning for Bushfire Protection 2006*;
- *Environmental Planning & Assessment Act – 1979*;
- *Rural Fires Act – 1997*;
- *Rural Fires Regulation 2008*;
- NSW Rural Fire Service – *Guideline for Bushfire Prone Land Mapping 2006*;
- *Bushfire Environmental Assessment Code 2006*;
- Building Code of Australia;
- Australian Standard A.S 3959-2009 “*Construction of Buildings in Bushfire Prone Areas*”;
- *Liverpool Council Bushfire Prone Land Map*.

ATTACHMENT A – Plan showing Defendable Space widths to the east of the building.



ATTACHMENT B – Copy of Director General's Requirements.



Contact: Emma Barnet
Phone: (02) 9228 6550
Fax: (02) 9228 6466
Email: emma.barnet@planning.nsw.gov.au

Mr Will Dwyer
Goodman Property Service (Aust) Pty Ltd
Level 17, 60 Castlereagh Street
Sydney NSW 2000

Our Ref: 12/20565

Dear Mr Dwyer

**State Significant Development - Director-General's Requirements
Mainfreight Dangerous Goods Storage Facility, Prestons (SSD - 5746)**

I have attached a copy of the Director-General's environmental assessment requirements (DGRs) for the preparation of an Environmental Impact Statement for the proposed Mainfreight Dangerous Goods Storage Facility.

These requirements are based on the information you have provided to date and have been prepared in consultation with the relevant government agencies and Liverpool City Council. Their comments, which you should address appropriately in preparing the EIS, are attached (see Attachment 2). Please note that the Department may alter these requirements at any time, and that you must consult further with the Department if you do not lodge a development application and EIS for the development within two years of the date of issue of these DGRs. The Department will review the EIS for the development carefully before putting it on public exhibition, and will require you to submit an amended EIS if it does not adequately address the DGRs.

I wish to emphasise the importance of effective and genuine community consultation and the need for proposals to proactively respond to the community's concerns. Accordingly a comprehensive, detailed and genuine community consultation and engagement process must be undertaken during the preparation of the EIS. This process must ensure that the community is both informed of the proposal and is actively engaged in issues of concern to them. Sufficient information must be provided to the community so that it has a good understanding of what is being proposed and of the potential impacts.

The Department prefers operations like the Mainfreight Dangerous Goods Storage Facility to operate under a single, modern planning approval. Consequently, the Department encourages you to develop the project with this preference in mind, and to consider surrendering any existing planning approvals for the current warehouse facility should the proposal be approved.

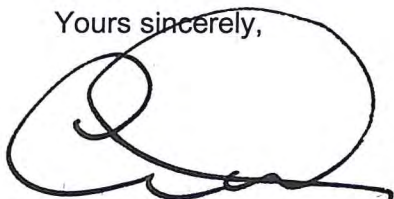
Your proposal may require a separate approval under Commonwealth *Environment Protection Biodiversity Conservation Act 1999* (EPBC Act). If an EPBC Act approval is required, I would appreciate it if you would advise the Department accordingly, as the Commonwealth approval process may be integrated into the NSW approval process, and supplementary DGR's may need to be issued.

I would appreciate it if you would contact the Department at least two weeks before you propose to submit the development application and EIS for your development. This will enable the Department to determine the:

- applicable fee (see Division 1AA, Part 15 of the *Environmental Planning and Assessment Regulation 2000*);
- consultation and public exhibition arrangements; and
- number of copies (hard-copy and CD-ROM) of the EIS required for review.

If you have any enquiries about these requirements, please contact Emma Barnett on the above details.

Yours sincerely,

A handwritten signature in black ink, appearing to be 'Chris Wilson', written over a large, loopy circular flourish.

1. 2. 13

Chris Wilson
Executive Director
Major Projects Assessment
As the Director-General's nominee

Director General's Environmental Assessment Requirements

Section 78A(8A) of the *Environmental Planning and Assessment Act 1979*

State Significant Development

Application Number	SSD - 5746
Development	The expansion of the existing Mainfreight Centre including the use of the facility for the storage and handling of around 500,000kg of materials classified as dangerous goods, including aerosol cans, acidic solids, acidic liquids and alkali liquids. The proposal includes the construction of around 13,260m² of new warehouse space, sheds and hardstand area.
Location	30-50 Yarrowa Street, Prestons (Lots 101 & 102 DP 1117691 and Lot 2 DP 28729)
Applicant	Goodman Property Services (Australia) Pty Ltd
Date of Issue	February 2013
General Requirements	The Environmental Impact Statement (EIS) must meet the minimum form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. In addition, the EIS must include a: • clear description of the existing operations carried out on the site and how the site operates lawfully under the <i>Environmental Planning and Assessment Act 1979</i> including any reliance on use rights and/or planning approvals; • detailed description of the development, including: – need for the proposed development; – justification for the proposed development; – likely staging of the development; – the nature and destination of materials to be received and distributed; and – plans of all proposed building works. • consideration of all relevant environmental planning instruments and policy documents, including identification and justification of any inconsistencies with these instruments and documents (e.g. the <i>Work Health and Safety Regulation 2011</i>); • risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; • detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: – a description of the existing environment, <u>using sufficient baseline data</u>; – an assessment of the potential impacts of all stages of the development, including any cumulative impacts, taking into consideration relevant guidelines, policies, plans and statutes; and – a description of the measures that would be implemented to avoid, minimise and if necessary, offset the potential impacts of the development, including proposals for adaptive management and/or contingency plans to manage any significant risks to the environment; • a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. The EIS must also be accompanied by a report from a qualified quantity

	surveyor providing: • a detailed calculation of the capital investment value (as defined in clause 3 of the <i>Environmental Planning and Assessment Regulation 2000</i>) of the proposed development, including details of all assumptions and components from which the CIV calculation is derived; • an estimate of the jobs that will be created during the construction and operational phases of the proposed development; and • certification that the information provided is accurate at the date of preparation.
Key Issues	The EIS must address the following specific issues: • Hazards and Risks – including – an assessment of the hazards and risks associated with the proposal and the existing operations on site (and the potential for off site impacts) including details of hazardous materials used or stored on the premises during operation; – A Preliminary Hazards Analysis (PHA) must be prepared in accordance with the Department's <i>Hazardous Industry Planning Advisory Paper No. 6 Hazard analysis and Multi-level Risk Assessment</i>. The PHA should: ▪ consider the risks from the proposed development (including loading/unloading and transport activities); and ▪ demonstrate that the proposed development would comply with the criteria set out in <i>Hazardous Industry Planning Advisory Paper No 4 Risk Criteria for Land Use Safety Planning</i>. – technical information on the environmental protection equipment to be installed on the premises such as air, water and noise controls, spill cleanup equipment and fire management and containment measures; – an assessment of any potential bushfire risks; and – consideration of any nearby Transgrid easements. • Transport and Access – including: – accurate predictions of the traffic generated by the development; – a detailed assessment of the potential impacts of the development on the capacity, efficiency and safety of the road network including the cumulative traffic generated by all existing and the proposed development; – details of any upgrades to road infrastructure that would be required due to the development; and – site accesses, internal roads and vehicular parking required as a result of the development. • Air Quality – including: – a quantitative assessment of the potential air quality impacts during construction and operation of the proposed development (including odour, dust, fugitive and greenhouse gas emissions). This assessment shall also consider potential impacts of the proposal on any nearby sensitive receivers; and – details of the proposed management and monitoring measures. • Noise and Vibration – including: – a noise impact assessment, including an assessment of predicted noise impacts and road traffic noise during both construction and operation; – the potential impacts of the proposal on any nearby sensitive receivers; – consideration of vibration impacts from excavation works; and – details of the proposed noise mitigation, monitoring and management measures. • Soil and Water – including a detailed assessment of potential soil, surface and groundwater impacts, particularly on nearby sensitive water sources/bodies; • Waste - including: – the measures that would be implemented to ensure that the proposal

	is consistent with the aims, objectives, and guidance in the <i>DECCW's Waste Classification Guidelines</i>; and – details of the quantities and classification of waste including chemicals and hazardous materials that will be generated, disposed of, handled and managed on site and stockpiled. • Visual and Design – including: – details of building design and how the facility would be built and fitted-out to handle the proposed storage of dangerous goods (i.e. bunding and tanker loading/unloading areas); and – any potential visual impacts on surrounding receivers from public areas. • Heritage.
Plans and Documents	The EIS must include all relevant plans, architectural drawings, diagrams and relevant documentation required under Schedule 1 of the <i>Environmental Planning and Assessment Regulation 2000</i>. These documents should be included as part of the EIS rather than as separate documents.
Consultation	During the preparation of the Environmental Impact Statement, you should consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups or affected landowners. In particular you must consult with the: • Environmental Protection Authority; • Office of Environment and Heritage; • NSW Office of Water; • Transport for NSW (including NSW Roads and Maritime Service); • NSW Fire Brigades; • NSW WorkCover; • Transgrid; • Liverpool City Council; and • the local community and stakeholders. The EIS must describe the consultation process and the issues raised, and identify where the design of the development has been amended in response to these issues. Where amendments have not been made to address an issue, a short explanation should be provided.
Further consultation after 2 years	If you do not lodge an EIS for the development within 2 years of the issue date of these DGRs, you must consult with the Director General in relation to the requirements for lodgement.
References	The assessment of the key issues listed above must take into account relevant guidelines, policies, and plans as identified. While not exhaustive, the following attachment contains a list of some of the guidelines, policies, and plans that may be relevant to the environmental assessment of this project.

ATTACHMENT 1

Technical and Policy Guidelines

The following guidelines may assist in the preparation of the Environmental Impact Statement. This list is not exhaustive and not all of these guidelines may be relevant to your proposal.

Many of these documents can be found on the following websites:

<http://www.planning.nsw.gov.au>

<http://www.bookshop.nsw.gov.au>

<http://www.publications.gov.au>

Policies, Guidelines and Plans

Aspect	Policy /Methodology
Hazard and Risk	AS/NZS 4360:2004 Risk Management HB 203:2006 Environmental Risk Management – Principals and Process State Environmental Planning Policy No 33– Hazardous and Offensive Development (SEPP 33) Planning Advisory Paper No. 6 – Guidelines for Hazardous Analysis (DUAP) Planning Advisory Paper No. 4 – Risk Criteria for Land Use Safety Planning (DUAP) Newcastle and Kooragang Island Area Risk Assessment Study, 1992
Soil and Water	
<i>Soil</i>	Acid Sulfate Soil Manual (ASSMAC) Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC & NHMRC) National Environment Protection (Assessment of Site Contamination) Measure 1999 (NEPC) State Environmental Planning Policy No. 55 – Remediation of Land Managing Land Contamination - Planning Guidelines SEPP 55 – Remediation of Land (DUAP and EPA) Rural Land Capability Mapping Agricultural Land Classification
	National Water Quality Management Strategy: Australian Guidelines for Fresh and Marine Water Quality (ANZECC/ARMCANZ) National Water Quality Management Strategy: Australian Guidelines for Water Quality Monitoring and Reporting (ANZECC/ARMCANZ) National Water Quality Management Strategy: Guidelines for Sewerage Systems - Effluent Management (ARMCANZ/ANZECC) National Water Quality Management Strategy: Guidelines for Sewerage Systems - Use of Reclaimed Water (ARMCANZ/ANZECC)
	National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC) National Water Quality Management Strategy - Guidelines For Water Recycling: Managing Health And Environmental Risks (Phase1) (EPHC, NRMMC & AHMC)
	Managing Urban Stormwater: Council Handbook. Draft (EPA) Managing Urban Stormwater: Treatment Techniques (EPA) Managing Urban Stormwater: Source Control. Draft (EPA)
<i>Surface Water</i>	

<i>Groundwater</i>	Managing Urban Stormwater: Soils & Construction (Landcom)
	Approved Methods for the Sampling and Analysis of Water Pollutants in NSW (DEC)
	Using the ANZECC Guideline and Water Quality Objectives in NSW (DEC)
	Floodplain Risk Management Guideline: Practical Consideration of Climate Change (DECC)
	National Water Quality Management Strategy Guidelines for Groundwater Protection in Australia (ARMCANZ/ANZECC)
	NSW State Groundwater Policy Framework Document (DLWC)
	NSW State Groundwater Quality Protection Policy (DLWC)
	NSW State Groundwater Quantity Management Policy (DLWC) Draft
Air Quality	The NSW State Groundwater Dependent Ecosystem Policy (DLWC)
	Guidelines for the Assessment and Management of Groundwater Contamination (DECC) Draft
Air Quality	Protection of the Environment Operations (Clean Air) Regulations 2010
	Approved Methods and Guidance for the Modelling and Assessment of Air Pollutants in NSW (DEC)
	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (DEC)
Odour	
	Technical Framework: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
	Technical Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC)
Greenhouse Gas	
	National Greenhouse Accounts (NGA) Factors
Greenhouse Gas	Guidelines for Energy Savings Action Plans (DEUS)
Noise	
	NSW Industrial Noise Policy (DECC)
	NSW Road Noise Policy (OEH)
Noise	Environmental Noise Control Manual (DECC)
Waste	
	Waste Avoidance and Resource Recovery Strategy (Resource NSW)
	Waste Classification Guidelines (DECC)
Waste	Protection of the Environment Operations (Waste) Regulations 2005
Transport	
	Guide to Traffic Generating Development (RTA)
	Road Design Guide (RTA)
Transport	Road and Related Facilities, EIS Guideline (DoPI)
Heritage	
	Draft Guidelines for Aboriginal Cultural Heritage Impact Assessment and Community Consultation (DEC)
	NSW Heritage Manual (NSW Heritage Office & DUAP)
<i>Non-Indigenous</i>	The Burra Charter (The Australia ICOMOS charter for places of cultural significance)

ATTACHMENT 2
Government Authority Responses to Request for Key Issues

Your Reference:	SSD 5746
Our Reference:	SYD12/01477
Contact:	Stella Qu
Telephone	8849 2520



Transport
Roads & Maritime
Services

Environmental Planning Officer
Major Projects Assessment
Department of Planning & Infrastructure
GPO Box 39
SYDNEY NSW 2001

Attention: Emma Barnet

REQUEST FOR THE DIRECTOR GENERAL'S REQUIREMENTS FOR EXPANSION OF EXISTING MAINFRIIGHT FACILITY (SSD 5746)

Dear Ms. Barnet,

I refer to your letter of 14 December 2012 (SSD 5746) requesting Roads and Maritime Services (RMS) to provide details of key issues and assessment requirements regarding the proposed expansion of existing mainfreight facility under the Environmental Planning and Assessment Act 1979.

RMS would like the following issues to be included in the transport and traffic impact assessment of the proposed development:

1. Daily and peak traffic movements likely to be generated by the proposed development including the impact on nearby intersections and the need / associated funding for upgrading or road improvement works (if required).
2. Details of the proposed accesses and the parking provisions associated with the proposed development including compliance with the requirements of the relevant Australian Standards (ie: turn paths, sight distance requirements, aisle widths, etc).
3. Proposed number of car parking spaces and compliance with the appropriate parking codes.
4. Details of service vehicle movements (including vehicle type and likely arrival and departure times).
5. The hazardous materials shall be transported using the designated dangerous goods routes. In this regard, a travel plan or map should be provided to DP&I which illustrates the routes for transportation of the dangerous goods to the subject site.

Roads and Maritime Services

LEVEL 11, 27-31 ARGYLE STREET PARRAMATTA NSW 2150
PO BOX 973 PARRAMATTA CBD NSW 2150 DX 28555
www.rms.nsw.gov.au | 13 22 13

Further enquiries on this matter can be directed to the nominated Land Use and Transport Planner, Stella Qu on phone 8849 2219 or facsimile (02) 8849 2520.

Yours sincerely



James Hall

Senior Land Use Planner

Transport Planning, Sydney Region

30 January 2013



Your Reference Mainfreight Prestons SSD 5746
Our reference : DOC12/52803
Contact : Nicolas Israel, 9995 6821

Mr Chris Ritchie
Manager – Industry
Mining and Industry Projects
Department of Planning and Infrastructure
GPO Box 39
SYDNEY NSW 2001

Dear Mr Ritchie

I refer to your request for the Environment Protection Authority's (EPA's) requirements for the Environmental Impact Statement (EIS) for the proposed expansion of the existing Mainfreight warehouse and distribution facility at 30-50 Yarrowa Street, Prestons received by the EPA on 17 December 2012.

The EPA has considered the details of the proposal as provided by the Department of Planning and Infrastructure (DoPI) and has identified the information it requires to assess the project in Attachment A. In summary, the EPA's key information requirements for the EIS are:

1. potential air quality impacts on neighbouring properties, taking into account cumulative air quality impacts of similar activities locally and regionally;
2. potential impacts of noise over the life of the development, especially during evening and night time periods. Of particular concern is the cumulative noise impacts on sensitive receivers from existing and proposed activities;
3. water pollution; and
4. waste generation, storage and management on site.

Notwithstanding the above and provided that the proposal is approved by the determining authority, Mainfreight Distribution Pty Limited (the proponent) will be required to hold an Environment Protection Licence (EPL) with the EPA under the *Protection of the Environment Operations Act 1979* (POEO Act). The proponent will need to make a separate application to the EPA to obtain this EPL. General information on licence requirements can be obtained from Environment Line on 131 555 or on the EPA's website www.environment.nsw.gov.au/licensing

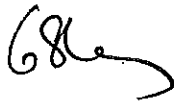
To assist the EPA in assessing the EIS, it is requested that the EIS follow the format of DoPI EIS guidelines and addresses the EPA's specific requirements outlined in Attachment A. If the necessary information is not adequately provided in the EIS then delays in the development and licence application processes may occur. In carrying out the assessment, the proponent should refer to the relevant guidelines as listed in Attachment B and any relevant industry codes of practice and best practice management guidelines.



The EPA requests that the proponent provides one hard copy and one electronic copy of the EIS when lodging its application to the EPA. These documents should be lodged at the EPA's office, PO Box 668, PARRAMATTA NSW 2124.

Should you wish to discuss the matter further, please contact Mr Nicolas Israel on (02) 9995 6821.

Yours sincerely

 30/1/13

GREG SHEEHY
Manager Sydney Industry
Environment Protection Authority

Attachment A

EPA's Recommended Environmental Assessment Requirements (EARs)



TABLE OF CONTENTS

1 Environmental impacts of the project

2 Licensing requirements

3 Air issues

3.1 Air quality

4 Noise and vibration

5 Waste, chemicals and hazardous materials/radiation

5.1 General waste – any proposal

5.2 Chemicals subject to Chemical Control Orders

6 Water and soils

6.1 Acid sulfate soils

6.2 Water



1 Environmental impacts of the project

1. Impacts related to the following environmental issues need to be assessed, quantified and reported on:

- Air Issues
 - air quality
 - greenhouse gas
- Noise and vibration
- Waste including hazardous materials and radiation
 - Waste EARs for waste facilities
 - General waste – any proposal
 - Chemicals subject to Chemical Control Orders
 - Hazardous materials and radiation
- Water and Soils
 - Acid sulfate soils
 - Contaminated sites
 - Soils - general
 - Water quality

2. Environmental Assessments (EAs) should address the specific requirements outlined under each heading below and assess impacts in accordance with the relevant guidelines mentioned. A full list of guidelines is included at **Attachment B**.

2 Licensing requirements

1. On the basis of the information submitted to date, it appears that the proposal is a scheduled activity (chemical storage) under the *Protection of the Environment Operations Act 1997* (POEO Act) and will therefore require an Environment Protection Licence (EPL) if approval is granted. The EIS should address the requirements of Section 45 of the POEO Act determining the extent of each impact and providing sufficient information to enable the EPA to determine appropriate limits for the EPL.
2. Should project approval be granted, the proponent will need to make a separate application to the EPA for an EPL to ensure that the proposed activities are reflected in that EPL prior to undertaking any on site works. Additional information is available through the *EPA Guide to Licensing* document:
(www.environment.nsw.gov.au/licensing/licenceguide.htm).

SPECIFIC ISSUES

3 Air issues

3.1 Air quality

The EIS should include a detailed air quality impact assessment (AQIA). The AQIA should:

1. Assess the risk associated with potential discharges of fugitive and point source emissions for all stages of the proposal. Assessment of risk relates to environmental harm, risk to human health and amenity.
2. Justify the level of assessment undertaken on the basis of risk factors, including but not limited to:
 - a) proposal location;
 - b) characteristics of the receiving environment; and
 - c) type and quantity of pollutants emitted.
3. Describe the receiving environment in detail. The proposal must be contextualised within the receiving environment (local, regional and inter-regional as appropriate). The description must include but need not be limited to:
 - a) meteorology and climate;
 - b) topography;
 - c) surrounding land-use; receptors; and
 - d) ambient air quality.
4. Include a detailed description of the proposal. All processes that could result in air emissions must be identified and described. Sufficient detail to accurately communicate the characteristics and quantity of all emissions must be provided.
5. Include a consideration of 'worst case' emission scenarios and impacts at proposed emission limits.
6. Account for cumulative impacts associated with existing emission sources as well as any currently approved developments linked to the receiving environment.
7. Include air dispersion modelling where there is a risk of adverse air quality impacts, or where there is sufficient uncertainty to warrant a rigorous numerical impact assessment. Air dispersion modelling must be conducted in accordance with the *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW* (2005) <http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf>.
8. Demonstrate the proposal's ability to comply with the relevant regulatory framework, specifically the *Protection of the Environment Operations (POEO) Act* (1997) and the *POEO (Clean Air) Regulation* (2002).
9. Provide an assessment of the project in terms of the priorities and targets adopted under the NSW State Plan 2010 and its implementation plan Action for Air.

10. Detail emission control techniques/practices that will be employed by the proposal.

4 Noise and vibration

1. In relation to noise, the following matters should be addressed (where relevant) as part of the Environmental Assessment.

General

2. Construction noise associated with the proposed development should be assessed using the *Interim Construction Noise Guideline* (DECC, 2009).
<http://www.environment.nsw.gov.au/noise/constructnoise.htm>
3. Vibration from all activities (including construction and operation) to be undertaken on the premises should be assessed using the guidelines contained in the *Assessing Vibration: a technical guideline* (DEC, 2006).
<http://www.environment.nsw.gov.au/noise/vibrationguide.htm>
4. If blasting is required for any reasons during the construction or operational stage of the proposed development, blast impacts should be demonstrated to be capable of complying with the guidelines contained in *Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration* (ANZEC, 1990).
<http://www.environment.nsw.gov.au/noise/blasting.htm>

Industry

5. Operational noise from all industrial activities (including private haul roads and private railway lines) to be undertaken on the premises should be assessed using the guidelines contained in the *NSW Industrial Noise Policy* (EPA, 2000) and *Industrial Noise Policy Application Notes*.
<http://www.environment.nsw.gov.au/noise/industrial.htm>

Road

6. Noise on public roads from increased road traffic generated by land use developments should be assessed using the guidelines contained in the *Environmental Criteria for Road Traffic Noise* (EPA, 1999).
<http://www.environment.nsw.gov.au/noise/traffic.htm>
7. Noise from new or upgraded public roads should be assessed using the *Environmental Criteria for Road Traffic Noise* (EPA, 1999).
<http://www.environment.nsw.gov.au/noise/traffic.htm>

5 Waste, chemicals and hazardous materials/radiation

5.1 General waste – any proposal

The EIS should:

1. Include a detailed plan for in-situ classification of waste material, including the sampling locations and sampling regime that will be employed to classify the waste, particularly with regards to the identification of contamination hotspots.
2. Identify, characterise and classify all waste that will be generated onsite through excavation, demolition or construction activities, including proposed quantities of the waste.
Note: All waste must be classified in accordance with the *EPA's Waste Classification Guidelines*.
3. Identify, characterise and classify all waste that is proposed to be disposed of to an offsite location, including proposed quantities of the waste and the disposal locations for the waste. This includes waste that is intended for re-use or recycling.
Note: All waste must be classified in accordance with the *EPA's Classification Guidelines*.
4. Include a commitment to retaining all sampling and classification results for the life of the project to demonstrate compliance with the *EPA's Waste Classification Guidelines*.
5. Provide details of how waste will be handled and managed onsite to minimise pollution, including:
 - a) Stockpile location and management
 - Labelling of stockpiles for identification, ensuring that all waste is clearly identified and stockpiled separately from other types of material (especially the separation of any contaminated and non-contaminated waste).
 - Proposed height limits for all waste to reduce the potential for dust and odour.
 - Procedures for minimising the movement of waste around the site and double handling.
 - Measures to minimise leaching from stockpiles into the surrounding environment, such as sediment fencing, geofabric liners etc.
 - a) Erosion, sediment and leachate control including measures to be implemented to minimise erosion, leachate and sediment mobilisation at the site during works. The EIS should show the location of each measure to be implemented. The Proponent should consider measures such as:
 - Sediment traps
 - Diversion banks

- Sediment fences
- Bunds (earth, hay, mulch)
- Geofabric liners
- Other control measures as appropriate

The Proponent should also provide details of:

- how leachate from stockpiled waste material will be kept separate from stormwater runoff;
 - treatment of leachate through a wastewater treatment plant (if applicable); and
 - any proposed transport and disposal of leachate off-site.
6. Provide details of how the waste will be handled and managed during transport to a lawful facility. If the waste possesses hazardous characteristics, the Proponent must provide details of how the waste will be treated or immobilised to render it suitable for transport and disposal.
 7. Include details of all procedures and protocols to be implemented to ensure that any waste leaving the site is transported and disposed of lawfully and does not pose a risk to human health or the environment.
 8. Include a statement demonstrating that the Proponent is aware of EPA's requirements with respect to notification and tracking of waste.
 9. Include a statement demonstrating that the Proponent is aware of the relevant legislative requirements for disposal of the waste, including any relevant Resource Recovery Exemptions, as gazetted by EPA from time to time.
 10. Outline contingency plans for any event that affects operations at the site that may result in environmental harm, including: excessive stockpiling of waste, volume of leachate generated exceeds the storage capacity available on-site etc.

5.2 Chemicals subject to Chemical Control Orders

1. The EIS must demonstrate how the Proponent will manage all materials and wastes containing scheduled chemical waste, dioxin and/or polychlorinated biphenyls (PCBs) in accordance with the applicable Chemical Control Order, National Management Plan or in accordance with a licence under the EHC Act.
2. Where a project involves any processing or treatment of scheduled chemicals, the proponent must provide the EPA with sufficient and appropriate documentation for a technology assessment to be undertaken by the EPA, in accordance with the following:
 - 'National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994'; and



- 'National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994'.

6 Water and soils

6.1 Acid sulfate soils

1. The potential impacts of the development on acid sulfate soils must be assessed in accordance with the relevant guidelines in the *Acid Sulfate Soils Manual* (Stone *et al.* 1998) and the *Acid Sulfate Soils Laboratory Methods Guidelines* (Ahern *et al.* 2004).
2. Describe mitigation and management options that will be used to prevent, control, abate or minimise potential impacts from the disturbance of acid sulfate soils associated with the project and to reduce risks to human health and prevent the degradation of the environment. This should include an assessment of the effectiveness and reliability of the measures and any residual impacts after these measures are implemented.

6.2 Water

Describe Proposal

1. Describe the proposal including position of any intakes and discharges, volumes, water quality and frequency of all water discharges.
2. Demonstrate that all practical options to avoid discharge have been implemented and environmental impact minimised where discharge is necessary.
3. Where relevant include a water balance for the development including water requirements (quantity, quality and source(s)) and proposed storm and wastewater disposal, including type, volumes, proposed treatment and management methods and re-use options.

Background Conditions

4. Describe existing surface and groundwater quality. An assessment needs to be undertaken for any water resource likely to be affected by the proposal.
5. State the Water Quality Objectives for the receiving waters relevant to the proposal. These refer to the community's agreed environmental values and human uses endorsed by the NSW Government as goals for ambient waters (<http://www.environment.nsw.gov.au/ieo/index.htm>). Where groundwater may be impacted the assessment should identify appropriate groundwater environmental values.
6. State the indicators and associated trigger values or criteria for the identified environmental values. This information should be sourced from the ANZECC (2000) Guidelines for Fresh and Marine Water Quality (http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality).
7. State any locally specific objectives, criteria or targets which have been endorsed by the NSW Government.

Impact Assessment

8. Describe the nature and degree of impact that any proposed discharges will have on the receiving environment.
9. Assess impacts against the relevant ambient water quality outcomes. Demonstrate how the proposal will be designed and operated to:
 - o protect the Water Quality Objectives for receiving waters where they are currently being achieved; and
 - o contribute towards achievement of the Water Quality Objectives over time where they are not currently being achieved.
10. Where a discharge is proposed that includes a mixing zone, the proposal should demonstrate how wastewater discharged to waterways will ensure the ANZECC (2000) water quality criteria for relevant chemical and non-chemical parameters are met at the edge of the initial mixing zone of the discharge, and that any impacts in the initial mixing zone are demonstrated to be reversible.
11. Assess impacts on groundwater and groundwater dependent ecosystems.
12. Describe how stormwater will be managed both during and after construction.

Monitoring

13. Describe how predicted impacts will be monitored and assessed over time.

Attachment B – Guidance Material

Title	Web address
<u>Relevant Legislation</u>	
<i>Contaminated Land Management Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+140+1997+cd+0+N
<i>Environmentally Hazardous Chemicals Act 1985</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+14+1985+cd+0+N
<i>Environmental Planning and Assessment Act 1979</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+203+1979+cd+0+N
<i>Protection of the Environment Operations Act 1997</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/act+156+1997+cd+0+N
<u>Licensing</u>	
EPA Guide to Licensing	www.environment.nsw.gov.au/licensing/licenceguide.htm
<u>Air Issues</u>	
Air Quality	
Approved methods for modelling and assessment of air pollutants in NSW (2005)	http://www.environment.nsw.gov.au/resources/air/ammodelling05361.pdf
<i>POEO (Clean Air) Regulation 2002</i>	http://www.legislation.nsw.gov.au/maintop/view/inforce/subordleg+642+2002+cd+0+N
<u>Noise and Vibration</u>	
Interim Construction Noise Guideline (DECC, 2009)	http://www.environment.nsw.gov.au/noise/constructnoise.htm
Assessing Vibration: a technical guideline (DEC, 2006)	http://www.environment.nsw.gov.au/noise/vibrationguide.htm
Australian and New Zealand Environment Council – Technical basis for guidelines to minimise annoyance due to blasting overpressure and ground vibration (ANZEC, 1990)	http://www.environment.nsw.gov.au/noise/blasting.htm
Industrial Noise Policy Application Notes	http://www.environment.nsw.gov.au/noise/traffic.htm
Environmental Criteria for Road Traffic Noise (EPA, 1999)	http://www.environment.nsw.gov.au/noise/traffic.htm
<u>Waste, Chemicals and Hazardous Materials and Radiation</u>	
Waste	
Environmental Guidelines: Solid Waste Landfills (EPA, 1996)	http://www.environment.nsw.gov.au/resources/waste/envguidlms/solidlandfill.pdf

Draft Environmental Guidelines - Industrial Waste Landfilling (April 1998)	http://www.environment.nsw.gov.au/resources/waste/envguidlns/industrialfill.pdf
Waste Classification Guidelines (DECC, 2008)	http://www.environment.nsw.gov.au/waste/envguidlns/index.htm
EPA Resource recovery exemption	http://www.environment.nsw.gov.au/waste/RRecoveryExemptions.htm
Chemicals subject to Chemical Control Orders	
Chemical Control Orders (regulated through the EHC Act)	http://www.environment.nsw.gov.au/pesticides/CCOs.htm
National Protocol - Approval/Licensing of Trials of Technologies for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
National Protocol for Approval/Licensing of Commercial Scale Facilities for the Treatment/Disposal of Schedule X Wastes - July 1994	Available in libraries
<u>Water and Soils</u>	
Acid sulphate soils	
Acid Sulfate Soils Planning Maps	http://canri.nsw.gov.au/download/
Acid Sulfate Soils Manual (Stone et al. 1998)	Manual available for purchase from: http://www.landcom.com.au/whats-new/the-blue-book.aspx Chapters 1 and 2 are on DoP's Guidelines Register at: Chapter 1 Acid Sulfate Soils Planning Guidelines: http://www.planning.nsw.gov.au/rdaquidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Planning%20Guidelines.pdf Chapter 2 Acid Sulfate Soils Assessment Guidelines: http://www.planning.nsw.gov.au/rdaquidelines/documents/NSW%20Acid%20Sulfate%20Soils%20Assessment%20Guidelines.pdf
Acid Sulfate Soils Laboratory Methods Guidelines (Ahern et al. 2004)	http://www.derm.qld.gov.au/land/ass/pdfs/lmg.pdf This replaces Chapter 4 of the Acid Sulfate Soils Manual above.
Water	
Water Quality Objectives	http://www.environment.nsw.gov.au/ieo/index.htm
ANZECC (2000) Guidelines for Fresh and Marine Water Quality	http://www.mincos.gov.au/publications/australian_and_new_zealand_guidelines_for_fresh_and_marine_water_quality
Applying Goals for Ambient Water Quality Guidance for Operations Officers – Mixing Zones	http://deccnet/water/resources/AWQGuidance7.pdf
Approved Methods for the Sampling and Analysis of Water Pollutant in NSW (2004)	http://www.environment.nsw.gov.au/resources/legislation/approved_methods-water.pdf





Liverpoolcitycouncil
creating our future together

Our Ref: 018162.2013
Contact: Tanya O'Brien 9821 9341

31 January 2013

Ms Emma Barnet
Department of Planning and Infrastructure
emma.barnet@planning.nsw.gov.au

Dear Ms Barnett

**Re: Minto Resource Recovery Facility (SSD 5339)
Manfrieght Dangerous Goods Storage Facility (SSD 5746)**

I write in response to your letter dated 14 December 2012 seeking Council's advice in regard to Director General's Requirements (DGRs) for the proposed expansion of the existing warehouse and distribution facility at 30-50 Yarrowa Street, Prestons, including the use of the facility for the storage of dangerous goods (the "proposed development").

Please note that while the letter to Council was dated 14 December 2012, Council did not receive a copy of the letter until 23 January 2013. As a result, Council requested an extension of time to prepare a detailed response. The request for an extension of time was denied. As such the following is provided, given the limited time available.

Council advises that the following matters should be incorporated into the DGRs for the proposed development:

- The proposal must fulfil the requirements pursuant to State Environmental Planning Policy 33: Hazardous and Offensive Development including:
 - * provision of a preliminary hazard analysis to support the development application that demonstrates that risk levels do not preclude approval,
 - * provision of a hazard and operability study, fire safety study, emergency plan and an updated hazard analysis undertaken during the design phase of the project,
 - * provision of a construction safety study to ensure facility safety during construction and commissioning, particularly when there is interaction with existing operations,
 - * commitment to implementation of a safety management system to give safety assurance during ongoing operation, and
 - * commitment to regular independent hazard audits to verify the integrity of the safety systems and that the facility is being operated in accordance with its hazards-related conditions of consent.
- The proposal must fulfil the requirements of SEPP 55 – Remediation of Land – Undertake a Stage 1- Preliminary site assessment under the NSW EPA's "*Guidelines for Consultants Reporting on Contaminated Sites*".
- An environmental Management Plan shall be developed. The Environmental Management Plan shall include but not be limited to:
 - * Measures to control noise emissions from the site
 - * Measures to suppress odours and dust emissions

Customer Service Centre Level 2, 33 Moore Street, Liverpool NSW 2170, DX 5030 Liverpool

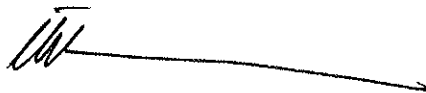
All correspondence to The General Manager, Locked Bag 7064 Liverpool BC NSW 1871 **Call Centre** 1300 36 2170

Fax 9821 9333 **Email** lcc@liverpool.nsw.gov.au **Web** www.liverpool.nsw.gov.au **NRS** 13 36 77 **ABN** 84 181 182 471

- * Selection of traffic routes to minimise residential noise intrusions
 - * Soil and sediment control measures
 - * Measures to identify hazardous and industrial wastes and the procedures for storage, removal and disposal
 - * Measures to address any other potential hazards given that the site is situated approximately 200m from a significant waterway (Cabramatta Creek) and 205m of a residential area.
- An acoustic report is to be prepared and submitted in accordance with the NSW EPA's *NSW Industrial Noise Policy*. The report shall include but is not limited to the following information:
 - * Noise measurements taken at the nearby noise sensitive locations.
 - * Verification that noise levels at the nearest potentially affected receiver comply with all relevant assessment criteria and where noise measurements required indicate that the relevant assessment criteria are exceeded, recommendations shall be provided in relation to how noise emissions can be satisfactorily reduced to comply with the assessment criteria.
 - A Traffic Impact Assessment (TIA), including intersection treatment and appropriate car parking provision, prepared in accordance with the RMS Guide to Traffic Generating Development carried out by an appropriately qualified and experienced person.
 - A detailed plan of haulage routes and times designed to minimise impact on residential areas and the local road network.
 - An assessment of the impact of required easements around existing Transgrid power infrastructure on the subject site to be conducted by an appropriately qualified and experienced person, with recommendations to be incorporated into the design of proposed internal roads and driveways.
 - The driveway arrangement is to maintain road safety for all road users, and if required separate light and heavy vehicles.
 - Demonstration of commitment to upgrade the access road (Yarrawa Road) and associated drainage infrastructure to industrial standard. Designs for infrastructure works are to meet Council's specifications.
 - A flora and fauna assessment should be required if the area of impact is identified as containing native vegetation or habitat for flora and fauna. The assessment is to be undertaken by a suitably qualified and experienced person.
 - Part of the subject site is bushfire prone. A Bushfire Impact Assessment should be undertaken by a suitably qualified and experienced person and all subsequent recommendations incorporated into the design of the proposed facility.

Should you require any further information on this matter, please do not hesitate to contact Council's Manager of Strategic Planning, Tanya O'Brien, on 9821 9341.

Yours sincerely



Milan Marecic
Director City Planning

Date: 23 January 2013

Our Ref: 2013/001917

Your Ref: SSD-5746

Mr Chris Ritchie
Manager – Industry
Mining and Industry Projects
NSW Department of Planning and Infrastructure
GPO Box 39
Sydney NSW 2001

Attn: Ms Emma Barnet

Dear Mr Ritchie,

**Mainfreight Dangerous Goods Storage Facility, Prestons
Proposed expansion to existing Facility (SSD-5746)**

Thank you for your letter dated 14 December 2012 requesting requirements to be included in the Director-General's Requirements (DGRs) for an EIS relating to the above proposal.

Based on information provided in the 'Overview of Proposed Development' document, the proposed facility would appear to be a Major Hazard Facility (MHF) under the Work Health and Safety Regulation 2011.

We suggest that you include the following in the DGRs.

- Prior to commencement of preparation of the EIS, the applicant must consult with the Major Hazard Facilities Unit of WorkCover NSW and obtain the requirements for the matters to be addressed in the EIS to demonstrate how compliance with the WHS Regulation 2011 will be met.

Should you have any queries, please contact Sohan Fernando on telephone 8281 6485 or e mail sohan.fernando@workcover.nsw.gov.au.

Yours sincerely,



Sohan Fernando
Senior Safety Analyst
Major Hazards Facilities Unit
WorkCover Authority of NSW

APPENDIX D

Noise Management Plan

OPERATIONAL NOISE MANAGEMENT PLAN

**Mainfreight Warehousing and Distribution Centre
30-50 Yarrowa Street, Prestons**

Prepared for:

Mainfreight
30-50 Yarrowa St
Prestons NSW 2170

SLR Ref: 610.18522-R02
Version No: -v1.0
December 2018



PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Mainfreight (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
610.18522-R02-v1.0	13 December 2018	David O'Brien Joshua Ridgway	Robert Hall	Robert Hall
610.13053-R3	20 January 2014	Robert Trieu Lee Hudson	Mark Blake	Lee Hudson
610.13053-R3	10 December 2013	Robert Trieu Lee Hudson	Mark Blake	Lee Hudson

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APPENDICES

Appendix A Acoustic Terminology

1 Introduction

1.1 Background

Mainfreight operates the Mainfreight Warehousing and Distribution Centre located at 30-50 Yarrowa Street, Prestons (the Site). The Site serves as the primary hub for Mainfreight's Sydney metropolitan road-based logistics. The Site is located approximately 45 km from the Sydney CBD and approximately 35 km from Port Botany.

The area zoning of the Site is classified IN3 for heavy industrial in accordance with Liverpool City Council's (LCC's) Local Environment Plan (LEP) 2008. The nearest residential zones are located approximately 200 m to the west and 650 m to the south of the Site.

Development Consent SSD-13_5746 for expansion of the Site was granted by the Minister for Planning and Infrastructure on 9 August 2013, pursuant to the provisions of Section 89E of the Environmental Planning and Assessment Act 1979. This was subsequently modified by SSD 5746 MOD 1, approved on 27 May 2014.

There are broad range of conditions which apply to this consent, one of which (Condition C31) requires the preparation of an Operational Noise Management Plan (ONMP).

1.2 Report Objectives

This ONMP has been prepared to detail noise management measures with the aim of minimising operational noise impacts on the nearby residential areas.

This ONMP documents monitoring, analysis, and reporting procedures required to achieve compliance with the Development Consent conditions relating to operational noise.

To account for multiple sources of noise in the ambient environment, attended noise measurements are the preferred method to determine the contribution, if any, of noise emissions from the Site to the ambient noise environment at nearby residential receivers.

1.3 Acoustic Terminology

Specific acoustic terminology is used in this report. An explanation of common acoustic terms is provided in **Appendix A**.

1.4 Site Overview and Layout

An overview of the Site location is shown in **Figure 1**. The Site layout is shown in **Figure 2**.

LEGEND

- Development Site
- Warehouse
- Cadastre

Scale: 1:4,000
GDA 1994 MGA Zone 56

23-Nov-2010
610.1053

[illegible]

2 Consent Conditions

The Development Consent SSD-13_5746 and SSD 5746 MOD 1 contain conditions relevant to this ONMP. These are outlined in **Table 1**.

Table 1 Consent Conditions Relevant to ONMP

Condition	Where addressed in this document									
Limits of Consent										
B5A. The number of truck movements between the hours of 10:00pm and 5:00am shall be restricted to a maximum of 40.	Refer to Section 6									
Operation of Plant and Equipment										
B12. The Applicant shall ensure that all plant and equipment used for the development is: (a) maintained in a proper and efficient condition; and (b) operated in a proper and efficient manner.	Refer to Section 6									
Operating Conditions										
C10. The Applicant shall ensure that: (j) between the hours of 7:00pm and 5:00am, heavy vehicles must only enter and leave the site via the central and eastern most truck access driveways located in Yarrowa Street, Prestons, which serve the new truck and car hardstand area located to the east of Building 1 (the front building) and to the north of Building 2 (the rear building);	Refer to Section 6									
Construction and Operational Hours										
C27. The development shall comply with the construction and operational hours in Table 2 for the site, unless otherwise agreed in writing by the EPA. <i>Table 2: Operating Hours</i> <table><tr><th>Activity</th><th>Day</th><th>Hours</th></tr><tr><td>Operations</td><td>Monday - Sunday</td><td>24 hours</td></tr></table>	Activity	Day	Hours	Operations	Monday - Sunday	24 hours	Refer to Section 6			
Activity	Day	Hours								
Operations	Monday - Sunday	24 hours								
Operational Noise Criteria										
C29. The development shall ensure that the noise generated by the development does not exceed the criteria in Table 4 at any private residential receivers. <i>Table 4: Noise impact assessment criteria dB(A)</i> <table><tr><th>Location</th><th>LAeq(15minute) (Day, Evening, Night)</th><th>LA1(1min) Night Time (Sleep Disturbance)</th></tr><tr><td>22 Michelago Circuit, Prestons</td><td>37</td><td>45</td></tr><tr><td>23 Coffs Harbour Ave, Hoxton Park</td><td>39</td><td>45</td></tr></table>	Location	LAeq(15minute) (Day, Evening, Night)	LA1(1min) Night Time (Sleep Disturbance)	22 Michelago Circuit, Prestons	37	45	23 Coffs Harbour Ave, Hoxton Park	39	45	Refer to Section 5
Location	LAeq(15minute) (Day, Evening, Night)	LA1(1min) Night Time (Sleep Disturbance)								
22 Michelago Circuit, Prestons	37	45								
23 Coffs Harbour Ave, Hoxton Park	39	45								

Condition	Where addressed in this document
Operating Conditions	
C30. The Applicant shall: (a) implement best management practice, including all reasonable and feasible noise management and mitigation measures to prevent and minimise construction, operational, low frequency and traffic noise generated by the development; (b) where practicable, keep all roller doors closed during the night time period; (c) minimise the noise impacts of the development during adverse meteorological conditions when noise criteria do not apply; (d) maintain the effectiveness of any noise suppression equipment on plant at all times and ensure defective plant is not used operationally until fully repaired; (e) modify and/or stop operations to ensure compliance with the relevant conditions of this consent; (f) ensure that the sound power levels of the container handler do not exceed 103dB(A)Leq; (g) provide all truck drivers with regular training and instructions in minimising the noise impacts of operating their vehicles; (h) ensure that all trucks and delivery vehicles switch off their engines during idle periods or during loading/unloading operations, particularly during the night time hours; and (i) ensure that no external public address system is used on site.	Refer to Section 6
Noise Management Plan	
C31. The Proponent shall prepare and implement a Noise Management Plan for the development in consultation with the EPA and to the satisfaction of the Secretary. The plan must: (a) be prepared and implemented by a suitably qualified and experienced person whose appointment has been approved by the Secretary; (b) be submitted for approval by the Secretary prior to commencement of construction; (c) describe the measures that will be implemented to minimise noise from the construction and operation of the project including: • best management practise is being employed on site; • traffic management noise is effectively managed; • the noise impacts of the project are minimised during any meteorological conditions when the noise criteria in this approval do not apply; • compliance with the relevant conditions of this approval. (d) describe the noise management system; (e) includes a noise monitoring program that: • is capable of evaluating performance of the project; • includes a protocol for determining exceedances of the relevant conditions of this approval and responding to complaints; • adequately supports the noise management system; and • evaluates and reports on the effectiveness of the noise management system.	This document. Refer to Section 6 Refer to Section 6 Refer to Section 7 & 8

Condition	Where addressed in this document
Incident Reporting	
D3. The Applicant shall notify the Secretary and any other relevant agencies of any incident or potential incident with actual or potential significant off-site impacts on people or the biophysical environment associated with the development as soon as practicable after the Applicant becomes aware of the incident.	Refer to Section 9
D4. Within 7 days of notifying the incident, the Applicant shall provide a written report to the Department and EPA that: (a) describes the date, time and nature of the incident; (b) identifies the cause, or likely cause, of the incident; and (c) describes what action has been taken to date to address the incident and what actions are proposed to be implemented in the future to either address the consequences of the incident or avoid a recurrence of the incident.	Refer to Section 9
Annual Review	
D5. One year after the commencement of operation, and annually thereafter, unless the Secretary directs otherwise, the Applicant shall review the environmental performance of the development to the satisfaction of the Secretary. The review shall: (a) describe the operations that were carried out in the past year; (b) analyse the monitoring results and complaints records of the development over the past year, which includes a comparison of these results against the • relevant statutory requirements, limits or performance measures/criteria; • monitoring results of previous years; and • relevant predictions in the EIS. (c) Identify any non-compliance over the last years, and describe what actions were (or are being) taken to ensure compliance; (d) Identify any trends in the monitoring data over the life of the development; (e) Provide a summary of results required for the EPL; and (f) Describe what measures will be implemented over the next year to improve the environmental performance of the development.	Refer to Section 10
Revision of Strategies, Plans & Programs	
D6. Within 3 months of the submission of an: (a) Incident report under Condition D4 of this schedule; (b) Annual review under Condition D5 of this schedule; (c) Any modification to this consent, the Applicant shall review, and if necessary revise, the strategies, plans, and programs required under this consent to the satisfaction of the Secretary. <i>Note: This is to ensure the strategies, plans, and programs are updated on a regular basis, and incorporate any recommended measures to improve the environmental performance of the development.</i>	Refer to Section 11

3 Objectives

The primary objective of this ONMP is to establish a noise management strategy for the operation of the Site that complies with the consent conditions, through provisions to:

- Evaluate noise impacts on sensitive receivers.
- Demonstrate compliance with the operational noise criteria.
- Implement applicable reasonable and feasible noise mitigation measures.
- Investigate ways to reduce the noise generated by the Site, if required.
- Report on these investigations and the implementation and effectiveness of these measures.

4 Noise Guidelines

The NSW *Industrial Noise Policy* (INP) (Environment Protection Agency (EPA), 2000) has been referenced in the preparation of this ONMP with regard to:

- Noise monitoring procedures.
- Noise monitoring instrumentation calibration.
- Monitoring of weather conditions.
- Implementation of mitigation measures.

It is noted that the EPA released the *Noise Policy for Industry* (NPfI) in October 2017, which replaces the INP, however, this ONMP references the INP as the Development Consent and subsequent modification for the Site were issued prior to release of the NPfI and hence also reference the INP.

5 Operational Noise Criteria

In accordance with Condition C29, Mainfreight shall ensure that the noise generated by the Site does not exceed the criteria in **Table 2** at any private residential receivers.

Table 2 Operational Noise Criteria

Location	LAeq(15minute) dBA (Day, Evening, Night)	LA1(1minute) dBA (Night)
22 Michelago Circuit, Prestons	37	45
23 Coffs Harbour Avenue, Hoxton Park	39	45

Noise monitoring shall be undertaken to determine compliance with the above criteria. The noise monitoring program is detailed in **Section 7**.

6 Operating Conditions and Management Measures

The Site must be operated in accordance with the conditions outlined in the Development Consent and in line with best management practices. The operating conditions and management measures applicable to the Site are listed below.

6.1 Operating Conditions

- Truck movements between 10:00 pm and 5:00 am shall be restricted to a maximum of 40 (entering or exiting), in accordance with Condition B5A.
- All plant and equipment operated on the Site must be maintained in a proper and efficient condition and operated in a proper and efficient manner, in accordance with Condition B12.
- Trucks must not use the western most access driveway on Yarrowa Street between 7:00 pm and 5:00 am, in accordance with Condition C10 (j).
- The Site is permitted to operate 24 hours per day, Monday to Sunday (inclusive), in accordance with Condition C27.
- Best management practices including reasonable and feasible noise management and mitigation measures must be implemented to minimise operational noise, low frequency noise and traffic noise generated by the Site, in accordance with Condition C30 (a).
- Where practicable, all roller doors must be closed during the night-time period, in accordance with Condition C30 (b).
- Weather conditions will be monitored (as per **Section 7.2**) and where adverse conditions are experienced or predicted (such as high winds or temperature inversions), operational changes will be made to avoid or reduce noise impacts during these periods, in accordance with Condition C30 (c).
- The effectiveness of any noise suppression equipment on plant must be maintained at all times and defective plant must not be used operationally until fully repaired, in accordance with Condition C30 (d).
- Should non-compliance with the conditions in this ONMP be observed, operations should be modified or stopped to ensure compliance, in accordance with Condition C30 (e).
- Operational Sound Power Levels (SWLs) of container handlers must not exceed 103 dBA LAeq, in accordance with Condition C30 (f). The SWL of all container handlers shall be measured in accordance with the monitoring requirements detailed in **Section 7.3**.
- All truck drivers must be provided with regular training and instructions in minimising the noise impacts of operating their vehicles, in accordance with Condition C30 (g).
- All trucks and delivery vehicles must switch off their engines during idle periods and loading/unloading operations, particularly during the night-time period, in accordance with Condition C30 (h).
- No external public address systems are to be used on Site, in accordance with Condition C30 (i).

6.2 Best Management Practices

- An awareness and understanding of noise issues and the use of quiet work practices shall be included in Site inductions for all staff, contractors and visitors to the Site. Specific mention of the following items will be included:
 - Site specific noise management measures to be followed.
 - Locations of nearby noise sensitive receivers.
- The simultaneous use of multiple items of significant noise generating equipment will be avoided wherever practicable, scheduling operations so they are used separately rather than concurrently.
- The use of noisy equipment should be scheduled during the daytime period, where practicable.
- Siting noisy equipment behind structures that act as barriers, or at the greatest distance from noise-sensitive areas, or orienting the equipment so that noise emissions are directed away from any sensitive areas, to minimise noise emissions.
- The volume of reversing and start-up alarms will be reduced to the minimum practicable level (while still complying with safety regulations) and the least intrusive alarms will be used (eg non-tonal where appropriate from a safety perspective).
- Specify maximum allowable noise/sound levels when purchasing equipment.
- Include maximum allowable noise/sound levels in tender documents and contracts.
- Regularly assess noise monitoring data to determine compliance status with the relevant conditions (refer to **Section 7**). If a non-compliance is observed, relocate, modify and/or stop operations to ensure compliance with the relevant conditions is maintained.
- Noise monitoring will include attended monitoring (refer to **Section 7.1**) as well as a program to monitor the SWLs of the plant on Site (refer to **Section 7.3**).
- An awareness of industry developments will be maintained in relation to noise mitigation for individual plant items used on the Site, in order to assess cost and practicality of plant upgrade or mitigation implementation.
- Enclosure of outdoor fixed plant (such as mechanical plant) where practicable.
- For equipment with enclosures, ensure doors and seals are well maintained and kept closed when not in use.
- Noise attenuation of mobile equipment such as trucks, forklifts, etc, where a noise issue is identified.
- Truck queuing and unnecessary trips will be minimised through logistical planning of materials delivery and work practices to minimise heavy vehicle noise emissions.
- All vehicles will enter and exit the Site in a forward direction to minimise noise from reversing alarms as far as practicable.
- All trucks are to have mufflers, and any other noise control equipment, regularly maintained in good working order. Trucking routes will use main roads, where feasible.

7 Noise Monitoring

In accordance with Conditions C31 (e) and D5, an operational noise monitoring program will be implemented that will comprise annual attended noise monitoring at the sensitive receiver locations outlined in Condition C29. These locations are detailed in **Section 7.1** and shown in **Figure 3**.

The results of the attended noise monitoring will be used to assess compliance with the relevant noise criteria (refer to **Section 5**). Meteorological monitoring will also be conducted (refer to **Section 7.2**) as well as annual assessments of equipment and plant SWLs (refer to **Section 7.3**). Details of major findings, monitoring results and mitigation measures (as required), will be reported after each survey.

7.1 Attended Noise Monitoring

7.1.1 Survey Intervals

Operational noise surveys will be conducted annually.

Additional operational noise surveys shall be undertaken in the following circumstances:

- Significant changes to the operation and/or management of the Site (including change of ownership or occupancy);
- Significant changes to the equipment, machinery and plant operated on the Site;
- Where it is identified that the performance of the Site is not meeting the objectives of the ONMP; and/or
- At the request of the Department or other relevant government agency.

7.1.2 Monitoring Locations

The noise monitoring locations outlined in the consent conditions are listed below and shown in **Figure 3**:

- M1: 22 Michelago Circuit, Prestons
- M2: 23 Coffs Harbour Avenue, Hoxton Park

It is noted that since the Development Consent was issued, other structures have been built between the Site and the noise monitoring locations specified above. As Condition C29 specifies that the noise generated by the Site should not exceed the criteria at any private residential receivers, the monitoring should be undertaken at the most-affected receiver in the vicinity of the above monitoring locations. Should a different residential property on Coffs Harbour Avenue or along Kurrajong Road be considered to be more impacted by noise from the Site, noise monitoring should be conducted at that property as a substitute to the corresponding location in the consent conditions.

In the event of a noise complaint associated with the operation of the Site, additional monitoring may be undertaken at the location of the noise complaint where this is considered to assist in the response to the complainant (refer to **Section 8**).

In accordance with INP requirements, noise monitoring will be conducted at the most noise-affected point on or within the residential boundary, or at the most affected point within 30 m of the dwelling where the dwelling is more than 30 m from the boundary. However, it is noted that it may not be practical to conduct noise monitoring at this location during all measurement periods. Where this location is considered to be impractical or inaccessible, a substitute monitoring location may be chosen that is considered to be representative of the Site noise contribution at the specified location.

Figure 3 Noise Monitoring Locations



7.1.3 Survey Periods and Times of Measurements

At each noise monitoring Site, operator attended noise monitoring will be conducted using an integrating averaging sound level meter over at least two 15 minute periods during each of the following time periods: daytime (7:00 am to 6:00 pm), evening (6:00 pm to 10:00 pm) and night-time (10:00 pm to 7:00 am).

Measurements shall be conducted outside of peak hour traffic flows (if practicable) and at a time when Site operations have been identified to be at high capacity during that period.

During the surveys, the operator will identify the character and duration of acoustically significant noise sources.

7.1.4 Methodology

Attended noise monitoring will be undertaken by a suitably trained and qualified acoustic consultant. All attended noise monitoring will be conducted in accordance with the INP and AS1055.1-1997 *Acoustics - Description and Measurement of environmental noise - General Procedures*.

The results of the attended noise monitoring will be compared with the Site noise criteria (refer to **Section 5**).

Measurement

Acoustic instrumentation used in attended monitoring will comply with Australian Standard AS IEC 61672.1-2004 - *Electroacoustics—Sound level meters, Part 1: Specifications* and will carry current National Association of Testing Authorities (NATA) or manufacturer calibration certificates. Instrument calibration will be checked before and after each survey, with the variation in calibrated levels not to exceed ± 0.5 dBA.

Suitable field notes will be taken in order to record the presence and contributions of Site noise sources (trucks, forklifts, etc) and other noise sources (birds, insects, dogs, passing cars, etc).

The noise level contribution from the Site operational activities will be quantified over a 15 minute measurement period. All relevant statistics will be recorded, including (at a minimum) L_{Aeq} , L_{Amax} , and L_{A90} .

Modifying factors from Section 4 of the INP will be used where applicable. Tonality and low frequency characteristics will be assessed by analysis of the measured L_{Aeq} spectrum.

Recording

The following information will be recorded for each noise monitoring survey:

- Operator's name, time of measurement, instrument calibration details, etc.
- Locations of attended noise instruments.
- Meteorological conditions for each measurement location.
- Statistical noise level descriptors together with notes identifying the principal noise sources.
- Project operating conditions including mobile and ancillary equipment operation and predominant location.

7.1.5 Compliance Assessment Protocol

Attended noise surveys are the primary method for describing the acoustic environment and determining the Site's compliance against the relevant noise criteria, as this allows a reasonably accurate determination of the Site noise contribution to the measured ambient noise levels.

If the above assessment determines that an exceedance of the operational noise criteria is due to the Site activities during relevant meteorological conditions, then the management strategies detailed in **Section 9** to help prevent recurrence will be implemented in order to reduce noise levels below the noise criteria.

Non-compliance of the noise criteria will be determined in accordance with Section 11.1.3 of the INP, which states the following in relation to when a development is in exceedance of the noise criteria:

A development will be deemed to be in non-compliance with a noise consent or licence condition if the monitored noise level is more than 2 dB above the statutory noise limit specified in the consent or licence condition.

A development will be in breach of a noise consent or licence condition if sustained non-compliances are not addressed and rectified.

Accordingly, the Site will be deemed to be in non-compliance with the relevant noise conditions where monitored levels indicate that the Site contribution to the recorded result exceeds the noise criteria by more than 2 dB.

7.2 Meteorological Monitoring

Meteorological data will be collected from the Bureau of Meteorology AWS at Horsley Park (Station ID 067119) to:

- Assist in the prediction of noise at nearby sensitive receivers; and
- To establish the correlation between weather conditions and the noise monitoring results in order to determine any weather conditions that produce greater noise impacts and/or a higher incidence of complaints.

The meteorological station is located approximately 9 km north of the Site and measures the wind speed and direction, standard deviation of wind direction, temperature (2 metres and 10 metres), barometric pressure, humidity, solar radiation and rainfall.

The meteorological conditions will be recorded for each monitoring activity or complaint.

7.2.1 Identification of Higher Level Impacts or Patterns between Noise Complaints and Temperature Inversions and Wind

Noise complaint details will be compared to the occurrence of any temperature inversions or wind to determine whether a higher level of impact or patterns of temperature inversions or wind have occurred.

The details of complaints received by the Site Environmental Manager will be entered into the complaints register (refer to **Section 8**). The receiving of any complaints will initiate the Environmental Manager to assess whether temperature inversions or wind may have contributed to the noise complaint.

A pattern of higher level noise impacts in relation to temperature inversions or wind will only be apparent after a number of complaints during temperature inversion or wind conditions have been received.

7.2.2 Quantification of Enhanced Impacts due to Temperature Inversions and Wind

Should enhanced noise impacts be identified, monitoring will occur at the source of the complaint in order to quantify the degree of enhanced impact against noise exceedance criteria.

7.2.3 Amelioration

Where noise complaints indicate higher levels of noise impact due to temperature inversions or wind, as quantified, measures will be taken to ameliorate enhanced impacts under adverse weather conditions. Noise reduction strategies and procedures for reducing noise emissions from the Site are outlined in **Section 6**.

While the criteria in **Section 5** do not apply under excessive weather conditions, noise management measures in **Section 6** should still be considered to minimise noise impacts.

7.3 Plant and Equipment Sound Power Level Monitoring

A program will be implemented to test the SWLs of all noise significant equipment on an annual basis or in the event of a specific noise complaint.

Methodology

The plant and equipment sound power level monitoring will be conducted in accordance with the following standards:

- ISO 6395 *“Earth-moving machinery - Determination of sound power level noise emissions - Dynamic test conditions”*;
- AS 2012.1 *“Acoustics - Measurement of airborne noise emitted by earth-moving machinery and agricultural tractors - Stationary test condition - Determination of Compliance With Limits for External Noise”*;
- AS 2012.2 *“Acoustics - Measurement of airborne noise emitted by earth-moving machinery and agricultural tractors - Stationary test condition - Operator’s Position”*; and
- ISO 4872 *“Acoustics - Measurement of airborne noise emitted by construction equipment intended for outdoor use- Method for determining compliance with noise limits”*.

Recording

The following information will be recorded for each SWL survey:

- Operator’s name, time of measurement, instrument calibration details, etc.
- Equipment ID, type, make and model.
- Location and operating mode of the equipment.
- Meteorological conditions during the survey period.
- LAeq and LMax noise level descriptors together with notes identifying the principal noise sources.
- Details of any extraneous noise during the measurement.

8 Complaints Handling and Register

Complaints will be received via the contact telephone number to be included on the Site signage.

A complaints register will be maintained by the Environmental Manager. Response to the complaint will be provided to the complainant within 24 hours.

Information recorded in the complaints register with respect to each complaint will include:

- Date and time of complaint.
- Name, address and telephone number of complainant if supplied, otherwise, a note stating details not supplied.
- Nature of complaint including details of the noise leading to the complaint and the time of occurrence and duration of the event.
- Response actions taken to date in relation to the complaint, including any follow-up contact made with the complainant. If no action was taken, the reason for the inaction shall be noted.

A summary of complaints, responses and actions will be provided in the annual monitoring report, or as otherwise agreed by the Secretary.

Preliminary investigations into the complaint will commence within 48 hours of the complaint receipt and adequate measures to identify and manage will be considered.

Where a complainant does not consider the initial response to the complaint to adequately address their concern, the following protocol will be implemented:

- A meeting will be held between the complainant and the Site Environmental Manager (and any other relevant persons determined by the Site Environmental Manager) to seek a resolution to the matter. The complainant will be provided with a written response from the Site Environmental Manager detailing the results of the investigations carried out to date and any future actions proposed to be undertaken in relation to the complaint.
- If the complainant remains dissatisfied with the response provided, they will be referred to an Independent Expert, who will assess the complaint in context with the Conditions of the Development Consent and any other relevant regulations and provide a report detailing the results of the investigations and any recommendations arising as a result. Copies of this report, including the response of the Site Environmental Manager to any issues raised, will be provided to the complainant, and the Department; and
- If the complainant still believes that the matter has not been resolved to their satisfaction, they will be referred to the Secretary of the Department for resolution.

9 Contingency Plan and Incident Reporting

In the event that a non-compliance with the noise conditions is identified, as per the protocol described in **Section 7.1.5**, the following Contingency Plan shall be implemented:

- Notify the Secretary and any other relevant agencies of any incident or potential incident with actual or potential noise impacts as soon as practicable after becoming aware of the incident, in accordance with Condition D3.
- Identify an appropriate course of action with respect to the identified impact(s), in consultation with specialists and the EPA, as necessary. For example, contingency measures such as, but not limited to, those described in **Section 9.1** of this ONMP.
- If requested, submit the proposed course of action to the Department for approval.
- Implement the approved course of action.
- In accordance with Condition D4, provide a written report to Department and any other relevant agencies within 7 days of notification of the incident that:
 - describes the date, time and nature of the incident;
 - identifies the cause, or likely cause, of the incident; and
 - describes what action has been taken to date to address the incident and what actions are proposed to be implemented in the future to either address the consequences of the incident or avoid a recurrence of the incident.

9.1 Potential Contingency Measures

Potential contingency measures will be reviewed during revisions of this ONMP. Key potential contingency measures to be implemented (following the identification of non-compliance with the noise conditions) may include the following:

- Notify affected landholder and tenants at the location of the exceedance as soon as practicable and provide them with details of actions taken, including noise monitoring results, until it can be shown that the Site is complying with the noise criteria.
- Complete a SWL review and model the noise emissions for examination of potential additional noise controls, and implement additional reasonable and feasible at source noise controls in addition to those described in **Section 6** of this ONMP.
- If requested by the Secretary, implement reasonable and feasible at-receiver noise controls (to be determined by a suitably qualified and experienced acoustic consultant).

10 Annual Review

In accordance with Condition D5, an annual review of the noise performance of the Site shall be prepared for submission to the Secretary. The review shall:

- Describe the operations that were carried out in the past year;
- Analyse the monitoring results and complaints records of the Site over the past year, which includes a comparison of these results against the relevant noise criteria, monitoring results of previous years, and relevant predictions from any noise assessments;
- Identify any non-compliances over the last year, and describe what actions were (or are being) taken to ensure compliance;
- Identify any trends in the monitoring data over the life of the Site;
- Provide a summary of results required for the EPL; and
- Describe what measures will be implemented over the next year to improve the environmental performance of the Site.

Periodic internal audits will be conducted to confirm that the Development Consent conditions and commitments and environmental management controls outlined in this ONMP are being properly implemented. Audit reports will be used to inform of any corrective actions.

11 Review and Improvement of Noise Management Plan

In accordance with Condition D6, this ONMP will be reviewed and, if necessary, updated within three months of the following:

- Submission of an incident report under Condition D4;
- Submission of an annual review under Condition D5;
- Approval of an application to modify the Site or the Development Consent;
- Significant changes to the operation and/or management of the Site (including change of ownership or occupancy);
- Significant changes to the equipment, machinery and plant operated on the Site;
- Where it is identified that the performance of the Site is not meeting the objectives of the ONMP; and/or
- At the request of the Department or other relevant government agency.

All employees and contractors will be informed of any revisions to the ONMP by Site Management during toolbox talks.

APPENDIX A

Acoustic Terminology

1 Sound Level or Noise Level

The terms 'sound' and 'noise' are almost interchangeable, except that in common usage 'noise' is often used to refer to unwanted sound.

Sound (or noise) consists of minute fluctuations in atmospheric pressure capable of evoking the sense of hearing. The human ear responds to changes in sound pressure over a very wide range. The loudest sound pressure to which the human ear responds is ten million times greater than the softest. The decibel (abbreviated as dB) scale reduces this ratio to a more manageable size by the use of logarithms.

The symbols SPL, L or L_p are commonly used to represent Sound Pressure Level. The symbol L_A represents A-weighted Sound Pressure Level. The standard reference unit for Sound Pressure Levels expressed in decibels is 2×10^{-5} Pa.

2 'A' Weighted Sound Pressure Level

The overall level of a sound is usually expressed in terms of dBA, which is measured using a sound level meter with an 'A-weighting' filter. This is an electronic filter having a frequency response corresponding approximately to that of human hearing.

People's hearing is most sensitive to sounds at mid frequencies (500 Hz to 4,000 Hz), and less sensitive at lower and higher frequencies. Thus, the level of a sound in dBA is a good measure of the loudness of that sound. Different sources having the same dBA level generally sound about equally loud.

A change of 1 dB or 2 dB in the level of a sound is difficult for most people to detect, whilst a 3 dB to 5 dB change corresponds to a small but noticeable change in loudness. A 10 dB change corresponds to an approximate doubling or halving in loudness. The table below lists examples of typical noise levels.

Sound Pressure Level (dBA)	Typical Source	Subjective Evaluation
130	Threshold of pain	Intolerable
120	Heavy rock concert	Extremely noisy
110	Grinding on steel	
100	Loud car horn at 3 m	Very noisy
90	Construction site with pneumatic hammering	
80	Kerbside of busy street	Loud
70	Loud radio or television	
60	Department store	Moderate to quiet
50	General Office	
40	Inside private office	Quiet to very quiet
30	Inside bedroom	
20	Recording studio	Almost silent

Other weightings (eg B, C and D) are less commonly used than A-weighting. Sound Levels measured without any weighting are referred to as 'linear', and the units are expressed as dB(lin) or dB.

3 Sound Power Level

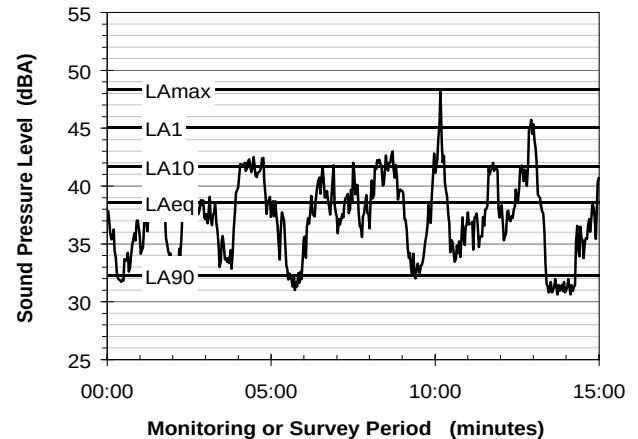
The Sound Power of a source is the rate at which it emits acoustic energy. As with Sound Pressure Levels, Sound Power Levels are expressed in decibel units (dB or dBA), but may be identified by the symbols SWL or L_w , or by the reference unit 10^{-12} W.

The relationship between Sound Power and Sound Pressure may be likened to an electric radiator, which is characterised by a power rating, but has an effect on the surrounding environment that can be measured in terms of a different parameter, temperature.

4 Statistical Noise Levels

Sounds that vary in level over time, such as road traffic noise and most community noise, are commonly described in terms of the statistical exceedance levels L_{AN} , where L_{AN} is the A-weighted sound pressure level exceeded for N% of a given measurement period. For example, the L_{A1} is the noise level exceeded for 1% of the time, L_{A10} the noise level exceeded for 10% of the time, and so on.

The following figure presents a hypothetical 15 minute noise survey, illustrating various common statistical indices of interest.



Of particular relevance, are:

- L_{A1} The noise level exceeded for 1% of the 15 minute interval.
- L_{A10} The noise level exceeded for 10% of the 15 minute interval. This is commonly referred to as the average maximum noise level.
- L_{A90} The noise level exceeded for 90% of the sample period. This noise level is described as the average minimum background sound level (in the absence of the source under consideration), or simply the background level.
- L_{Aeq} The A-weighted equivalent noise level (basically, the average noise level). It is defined as the steady sound level that contains the same amount of acoustical energy as the corresponding time-varying sound.

When dealing with numerous days of statistical noise data, it is sometimes necessary to define the typical noise levels at a given monitoring location for a particular time of day. A standardised method is available for determining these representative levels.

This method produces a level representing the 'repeatable minimum' L_{A90} noise level over the daytime and night-time measurement periods, as required by the EPA. In addition, the method produces mean or 'average' levels representative of the other descriptors (L_{Aeq} , L_{A10} , etc).

5 Tonality

Tonal noise contains one or more prominent tones (ie distinct frequency components), and is normally regarded as more offensive than 'broad band' noise.

6 Impulsiveness

An impulsive noise is characterised by one or more short sharp peaks in the time domain, such as occurs during hammering.

7 Frequency Analysis

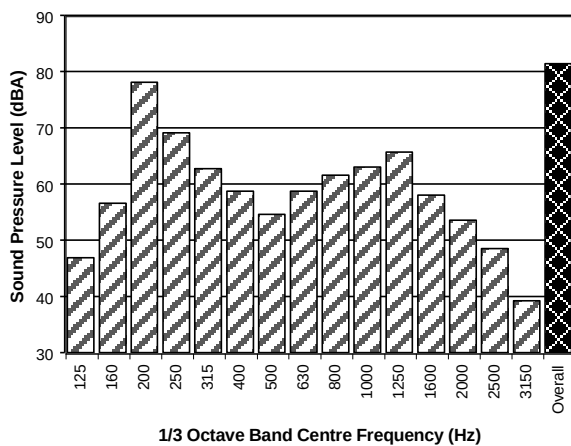
Frequency analysis is the process used to examine the tones (or frequency components) which make up the overall noise or vibration signal. This analysis was traditionally carried out using analogue electronic filters, but is now normally carried out using Fast Fourier Transform (FFT) analysers.

The units for frequency are Hertz (Hz), which represent the number of cycles per second.

Frequency analysis can be in:

- Octave bands (where the centre frequency and width of each band is double the previous band)
- 1/3 octave bands (3 bands in each octave band)
- Narrow band (where the spectrum is divided into 400 or more bands of equal width)

The following figure shows a 1/3 octave band frequency analysis where the noise is dominated by the 200 Hz band. Note that the indicated level of each individual band is less than the overall level, which is the logarithmic sum of the bands.



8 Vibration

Vibration may be defined as cyclic or transient motion. This motion can be measured in terms of its displacement, velocity or acceleration. Most assessments of human response to vibration or the risk of damage to buildings use measurements of vibration velocity. These may be expressed in terms of 'peak' velocity or 'rms' velocity.

The former is the maximum instantaneous velocity, without any averaging, and is sometimes referred to as 'peak particle velocity', or PPV. The latter incorporates 'root mean squared' averaging over some defined time period.

Vibration measurements may be carried out in a single axis or alternatively as triaxial measurements. Where triaxial measurements are used, the axes are commonly designated vertical, longitudinal (aligned toward the source) and transverse.

The common units for velocity are millimetres per second (mm/s). As with noise, decibel units can also be used, in which case the reference level should always be stated. A vibration level V , expressed in mm/s can be converted to decibels by the formula $20 \log (V/V_0)$, where V_0 is the reference level (10^{-9} m/s). Care is required in this regard, as other reference levels may be used by some organisations.

9 Human Perception of Vibration

People are able to 'feel' vibration at levels lower than those required to cause even superficial damage to the most susceptible classes of building (even though they may not be disturbed by the motion). An individual's perception of motion or response to vibration depends very strongly on previous experience and expectations, and on other connotations associated with the perceived source of the vibration. For example, the vibration that a person responds to as 'normal' in a car, bus or train is considerably higher than what is perceived as 'normal' in a shop, office or dwelling.

10 Over-Pressure

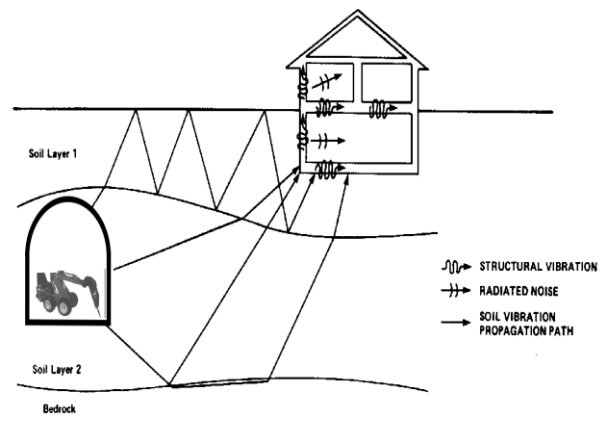
The term 'over-pressure' is used to describe the air pressure pulse emitted during blasting or similar events. The peak level of an event is normally measured using a microphone in the same manner as linear noise (ie unweighted), at frequencies both in and below the audible range.

11 Ground-borne Noise, Structure-borne Noise and Regenerated Noise

Noise that propagates through a structure as vibration and is radiated by vibrating wall and floor surfaces is termed 'structure-borne noise', 'ground-borne noise' or 'regenerated noise'. This noise originates as vibration and propagates between the source and receiver through the ground and/or building structural elements, rather than through the air.

Typical sources of ground-borne or structure-borne noise include tunnelling works, underground railways, excavation plant (eg rockbreakers), and building services plant (eg fans, compressors and generators).

The following figure presents an example of the various paths by which vibration and ground-borne noise may be transmitted between a source and receiver for construction activities occurring within a tunnel.



The term 'regenerated noise' is also used in other instances where energy is converted to noise away from the primary source. One example would be a fan blowing air through a discharge grill. The fan is the energy source and primary noise source. Additional noise may be created by the aerodynamic effect of the discharge grill in the airstream. This secondary noise is referred to as regenerated noise.

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APPENDIX E

Energy Efficiency and Greenhouse Gas Reduction Management Plan

ENERGY EFFICIENCY AND GREENHOUSE GAS REDUCTION

**Prestons Distribution Centre, Mainfreight Expansion
26 Yarrowa Street, Prestons, NSW**

Prepared for:

Mainfreight Distribution Centre
50 Yarrowa Street
Prestons NSW 2170

SLR Ref: 610.13053-R425-R01
Version No: -v1.0
December 2018



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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Mainfreight Distribution Centre (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
610.18522 R03 V0.1	11 December 2018	Dr Neihad Al-Khalidy	Sam Hayes	Dr Neihad Al-Khalidy

EXECUTIVE SUMMARY

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Mainfreight Distribution Pty Ltd (Mainfreight) to prepare an Energy Efficiency and Greenhouse Gas Emissions Program (EE & GHG) for the proposed Mainfreight Distribution Centre extension at 26 Yarrowa Street, Prestons NSW.

This EE & GHG is designed to satisfy Condition C33 *Energy Efficiency & Greenhouse Gas Emissions* of the Development Consent (DC) for Application Number SSD-13_5746.

Condition 33 *Energy Efficiency & Greenhouse Gas Emissions* of the DC states that:

The program must:

1. Be approved by the Director-General prior to commencement of construction.
2. Compare the proposed energy usage of the development to other existing Australian Warehouse centres and set benchmarks for the industry best practice.
3. Investigate reasonable and feasible energy efficiency measure available.
4. Describe the measures that would be implemented onsite, demonstration the use if best available technology; and
5. Include a program to monitor and report annually on the efficiency of the measures implemented and ensure the development will continue to operate at industry best practice over time.

The benchmark energy consumption of the proposed warehouse extension is **1,109, 375.5** kWh per annum.

It is estimated that the annual electricity consumption of the proposed expansion will be

- 799,364 KWh, equivalent to 655.47 tonnes of Greenhouse Gas Emissions
- 72% annual energy consumption of other existing Australian Warehouse of similar size.

It is therefore estimated that the proposed Mainfreight Expansion will consume approximately 28% less energy compared to existing Australian warehouses.

Annual reviews of actual building energy will be carried out once the warehouses are operational to check the actual energy usage and energy savings and verify that all systems are performing at their optimum efficiency. This will provide an opportunity for the systems to be tuned to optimise time schedules to best match occupant needs and system performance while satisfying the sustainability target for the project.

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1 Introduction

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Mainfreight Distribution Pty Ltd (Mainfreight) to prepare an Energy Efficiency and Greenhouse Gas Emissions Program (EE & GHG) for the proposed Mainfreight Distribution Centre extension at 26 Yarrowa Street, Prestons NSW.

This EE & GHG is designed to satisfy Condition C33 *Energy Efficiency & Greenhouse Gas Emissions* of the Development Consent (DC) for Application Number SSD-13_5746.

2 Objective

Condition 33 *Energy Efficiency & Greenhouse Gas Emissions* of the DC states that:

The program must:

1. Be approved by the Director-General prior to commencement of construction.
2. Compare the proposed energy usage of the development to other existing Australian Warehouse centres and set benchmarks for the industry best practice.
3. Investigate reasonable and feasible energy efficiency measure available.
4. Describe the measures that would be implemented onsite, demonstration the use if best available technology; and
5. Include a program to monitor and report annually on the efficiency of the measures implemented and ensure the development will continue to operate at industry best practice over time.

3 Project Overview

3.1 Site Location

The Mainfreight Distribution Centre is located at 26 Yarrowa Street, Prestons. The area zoning is classified “IN3” for heavy industrial in accordance with Liverpool City Council’s (LCC’s) Local Environment Plan (LEP) 2008 and the site comprises the following property titles (**Figure 1**):

- Lot 101 on DP 1117691,
- Lot 102 on DP 1117691, and
- Lot 2 on DP 28729.

Project location

Existing Site

Extension Area

LEGEND

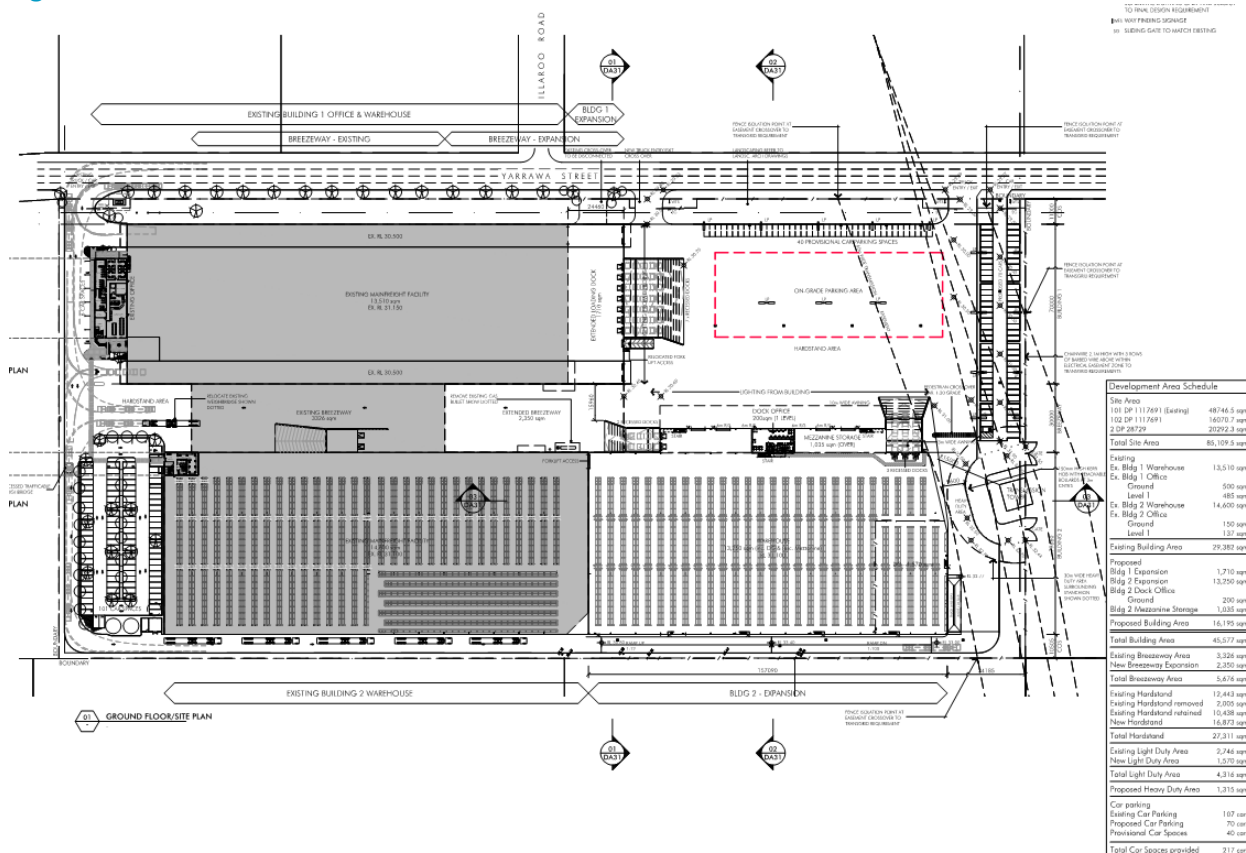
- Development Site
- Warehouse
- Cadastral

The development consists of

- a new 13,250 m² warehouse,
- 200 m² dock office,
- 1,035 m² mezzanine storage, and
- 1710 m² extended loading dock.

Figure 2 shows an overall site plan; new features are unshaded.

Figure 2 Site Plan



4 Baseline Energy Consumption and Benchmarking

4.1 Existing Australian Warehouses Energy Consumption

The Australia Bureau of Statistics (ABS) Series 46600 "Energy Use, Electricity Generation and Environmental Management, Australia, 2011-2012" was the primary dataset used to find the average energy consumption of non-refrigerated warehouses in Australia. In the year 2011-2012, ABS assessed the data for 665 warehouses and their total annual energy consumption is 683 GWh. 30 out of these warehouses receive electricity from renewable sources such as GreenPower, wind, solar etc.

The average size of the warehouses in Australia is 15,000 m² and therefore the average energy consumption of non-refrigerated warehouses is 68.5 kWh per m² per annum.

The size of the proposed warehouse extension is 16,195 m² including the warehouse, dock office, mezzanine storage office and loading dock.

Therefore the benchmark energy consumption of the proposed warehouse extension is:

$$= 16,195 \text{ m}^2 \times 68.5 \text{ kWh/m}^2 = \mathbf{1,109,375.5 \text{ kWh per annum.}}$$

4.2 Baseline Energy Use

In order to assess the energy usage of the completed warehouse extension, all services energy consuming items proposed for the extension were accounted for. The electrical, mechanical and architectural plans were assessed and the following items were identified:

- Interior and perimeter lighting;
- Split air-conditioners to offices;
- Electric hot water heater;
- Ventilation fans; and
- Rainwater reuse pump.

The project will involve 10 battery charger bays for 39 forklifts, not currently shown on the drawings.

Miscellaneous energy consumption items such as computers and kitchen appliances are known to be installed upon completion and their power rating were estimated from previous SLR projects and availability on the market.

From information provided by the owner the hours of operation of the extension are as follow:

- Dock office: Monday – Friday, 7:30 am to 5:30 pm
- Warehouse and Loading dock: Everyday, 5:00 am to 7:00 pm

The following assumptions are made:

- Air-conditioning system in the office is running for 12 hours per day, Monday to Friday.
- Smoke clearance fans in the warehouse are operated 24 hours per day, seven days per week.
- The battery charger is running for 10 hours per day, seven days per week.
- The outdoor lighting is on during the night time for 8 hours per day, seven days per week.

Table 1 shows the estimated annual energy consumption of the proposed Mainfreight Expansion at 26 Yarrowa Street based on the information provided by Mainfreight.

It is expected that the annual electricity consumption of the proposed expansion will be

- 799,364 KWh, equivalent to 821.7 tonnes of Greenhouse Gas Emissions
- 72 % annual energy consumption of other existing Australian Warehouse of similar size.

It is therefore estimated that the proposed Mainfreight Expansion will consuming approximately 27.9% less energy compared to existing Australian warehouses.

The energy end-uses were grouped into the following categories and are summarised **Figure 3**:

- Lighting;
- HVAC;
- Equipment (Kitchen appliances and office equipment); and

- Domestic Hot Water.

Figure 3 Estimated Mainfreight Expansion Electricity End-Uses Summary Chart

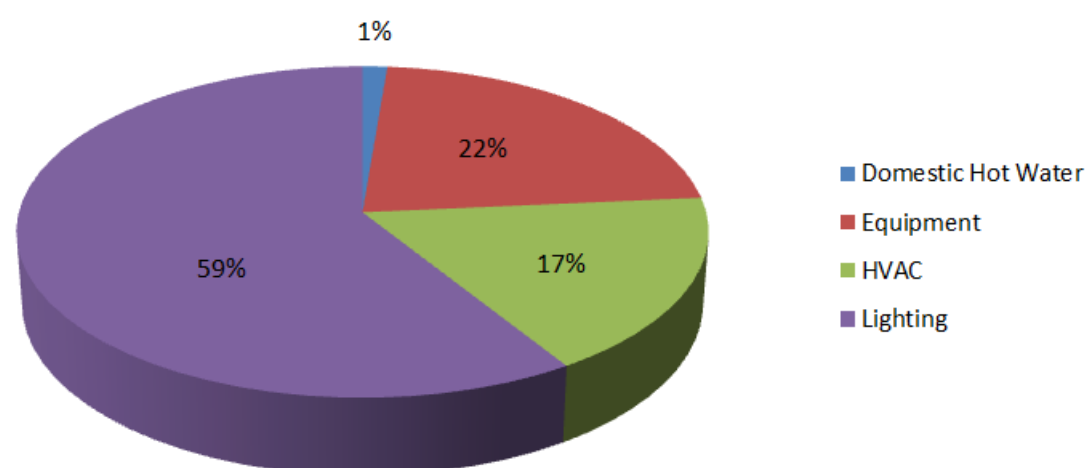


Table 1 Electricity Consuming Equipment for Proposed Mainfreight Expansion

Location	Energy End Use Description	Type of Electricity Usage	Rating (kW)	Quantity	Total Demand (kW)	Load Factor	Annual hours of Operation	Annual consumption (kWh)
Warehouse extension	4x 54W T5 Fluorescent on daylight sensors	Lighting	0.216	307	66.312	0.8	5110	271083.5
	LB lighting	Lighting	0.25	13	3.25	1	5110	16607.5
	Forklift Battery Chargers	Equipment	4.3	10	43	1	3650	156950.0
	Smoke clearance fan	HVAC	2.2	6	13.2	1	8760	115632.0
	Hot water heater	Domestic Hot Water	3.6	1	3.6	0.2	8760	6307.2
Dock office	T5 2x28W	Lighting	0.056	25	1.4	1	3120	4368
	AC1 Ducted split system	HVAC	2.5	1	2.5	0.8	3120	6240.0
	AC2 Ducted split system	HVAC	4	1	4	0.8	3120	9984.0
	AC3 Cassette split cassette	HVAC	2	1	2	0.8	3120	4992.0
	Comms room high wall split	HVAC	1	1	1	0.8	3120	2496.0
	Computer	Equipment	0.3	16	4.8	0.8	3120	11980
	Printer photocopier	Equipment	0.4	1	0.4	0.2	8760	700.8
	Fridge	Equipment						500.0

Location	Energy End Use Description	Type of Electricity Usage	Rating (kW)	Quantity	Total Demand (kW)	Load Factor	Annual hours of Operation	Annual consumption (kWh)
	Boiling water unit	Domestic Hot Water	2.3	1	2.3	0.2	8760	4029.6
	Server	Equipment	1	1	1	0.3	8760	2628.0
Dock office WC	Downlight	Lighting	0.036	16	0.576	1	3120	1797.1
Dock Office Exhaust	Exhaust	HVAC	0.2	1	0.2	1	3120	312
Loading dock expansion	Metal Halide	Lighting	0.4	21	8.4	1	5110	42924.0
Extended Breezeway	"C" lighting	Lighting	0.4	21	8.4	1	5110	42924
Mezzanine	LB lighting	Lighting	0.25	17	4.25	1	5110	21717.5
Outside	Pole lighting	Lighting	0.4	33	13.2	1	2920	38544.0
	Low bay	Lighting	0.25	43	10.75	1	2920	31390.0
	Rainwater reuse pump	Equipment	0.75	1	0.75	0.8	8760	5256.0
Total								799364

5 Energy Efficiency Measures

SLR has identified the followings energy efficiency measures proposed to the Mainfreight extension:

1. T5 Fluorescent light to the office area.
2. Motion control with programmable time clock to office and amenities lighting.
3. Building fabric complying with BCA Section J for the offices, decreases the heat gain and loss through the office areas and therefore decreasing the loads on the air-conditioning systems.
4. 10% translucent sheets to the roof of the warehouse will help decreasing the use of artificial lighting during day time.
5. Energy efficient T5 fluorescent lighting inside the warehouse controlled by daylight sensors.
6. Three of the proposed air-conditioning systems have a COP/EER of more than 3.0 and one has a COP of 2.8.
7. R1.5 roof insulation to the metal deck roof and full height precast concrete walls to the warehouse.
8. Light and power and mechanical equipment is also required to have its own meter.
9. Louvre are located on the southern walls of the warehouse and roller doors which are will be generally open during operation hours are located on the northern walls, allowing for natural cross ventilation throughout the warehouse.

5.1 Recommended Energy Efficiency Measures

SLR recommends the following energy efficiency measures to improve the energy rating of proposed extensions:

- Light coloured roof to reflect the daylight and keep the warehouse at a comfortable temperature.
- The warehouse lighting should be properly zoned and lights close to the skylights should be in separate zones to other lights.
- High energy star rating kitchen appliances and office equipment should be selected
- The staff should be educated to switch off their computers overnight.

6 Energy Monitoring

All sustainable measures will be implemented into the project need to be commissioned and tuned once the project completed, to ensure all services operate to their full potential and as designed.

An energy audit and management review will be undertaken on a yearly basis to ensure employees are following energy savings procedures correctly. Where audits show that energy savings procedures are not carried out effectively, additional employee training should be undertaken and signage and procedures re-examined.

6.1 Energy Metering and Monitoring

To enable effective review of energy usage by the project, sub-metering should be implemented for all major energy consuming processes or items of equipment including sub-metering for all loads greater than 100 kVA.

Electrical equipment should be maintained to Australian Standards to ensure unnecessary energy wastage is minimised. Roof access system is proposed for third party access to roof for carry out necessary maintenance as required.

6.2 Roles and Responsibilities

It is the responsibility of the facility manager to routinely check energy savings procedures are undertaken correctly (i.e. lighting turned off while areas of the development are not in use). The facility manager should also ensure all monitoring and audit results are well documented and carried out on a yearly basis.

7 Conclusion

SLR Consulting Australia Pty Ltd (SLR) has been engaged by Mainfreight Distribution Pty Ltd (Mainfreight) to prepare An Energy Efficiency and Greenhouse Gas Emissions Program (EE & GHG) for the proposed Mainfreight Distribution Centre extension at 26 Yarrowa Street, Prestons NSW.

It is expected that the annual electricity consumption of the proposed expansion will be

- 799,364 KWh, equivalent to 655.47 tonnes of Greenhouse Gas Emissions.
- 72% annual energy consumption of other existing Australian Warehouse of similar size.

It is therefore estimated that the proposed Mainfreight Expansion will consuming approximately 28% less energy compared to existing Australian warehouses.

It is the responsibility of the facility manager to routinely check energy savings procedures are undertaken correctly (i.e. lighting turned off while areas of the development are not in use). The facility manager should also ensure all monitoring and audit results are well documented and carried out on a yearly basis.

8 References

- 1 ABS Series 46600 *"Energy Use, Electricity Generation and Environmental Management, Australia, 2011-2012"*
- 2 Energetics 2012, *"Energy use and energy efficiency opportunity data for commercial sector and small /medium businesses"*
- 3 ASHRAE, 2008 *"Advanced Energy Design Guide for Small Warehouses and Self-Storage Buildings"*
- 4 Department of the Environment and Energy *"National Greenhouse Account Factors"* July 2018

APPENDIX A

Drawing List

Drawing Number	Drawings Title	Date
4167_DA01	Site/Ground Floor Plan	09.04.13
4167_102	Site/Roof Plan	06.08.13
4167_105	Building 1 Demolition Plan	24.07.13
4167_106	Building 2 Demolition Plan	24.07.13
4167_111	Building 1 Ground Floor Plan	06.08.13
4167_112	Building 1 Roof Plan	06.08.13
4167_113	Building 2 Ground Floor Plan	06.08.13
4167_114	Building 2 Mezzanine Floor	06.08.13
4167_115	Building 2 Roof Plan	06.08.13
4167_121	Dock Office Pan & Wall Setout	06.08.13
4167_201	Site Elevations	06.08.13
4167_211	Building 1 Elevations	24.07.13
4167_212	Building 2 Elevations	06.08.13
4167_301	Sections	24.07.13
4167_321 to 325	Wall Sections	06.08.13
M01	Mechanical Services Dock office layout	31.07.13
M02	Mechanical Services Roof Layout	31.07.13
E-00	Conduit & DB Locations	16.08.13
E-01	External Power & Lighting Layout	19.08.13
E-02	Warehouse Lighting	19.08.13
E-03	Warehouse Power	19.08.13
E-04	Dock Office Power & Lighting	16.08.13
E-05	Single Line Diagram Legend & Cable sizes	16.08.13
E-06	Mezzanine & Freight Handling Expansion Light & Power	19.08.13

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APPENDIX F

Waste Management Plan

OPERATIONAL WASTE MANAGEMENT PLAN

**Prestons Distribution Centre
Prestons, NSW**

Prepared for:

Mainfreight Distribution Pty Ltd
50 Yarrowa Street
Prestons NSW 2170

SLR Ref: 610.18522-R04
Version No: -v2.0
December 2018



PREPARED BY

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BASIS OF REPORT

This report has been prepared by SLR Consulting Australia Pty Ltd with all reasonable skill, care and diligence, and taking account of the timescale and resources allocated to it by agreement with Mainfreight Distribution Pty Ltd (the Client). Information reported herein is based on the interpretation of data collected, which has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of the Client. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from SLR

SLR disclaims any responsibility to the Client and others in respect of any matters outside the agreed scope of the work.

DOCUMENT CONTROL

Reference	Date	Prepared	Checked	Authorised
610.18522-R04v2.0	13 December 2018	Dale Beckham	Andrew Quinn	Andrew Quinn
610.18522-R04v1.0	5 December 2018	Dale Beckham	Andrew Quinn	DRAFT
630.10523 Revision 2	4 February	Gemma Dawson	Gemma Dawson	Gemma Dawson
630.10523 Revision 1	12 November 2013	Gemma Dawson	Jason Watson	Jason Watson

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1 Introduction

SLR Consulting Australia Pty Ltd (SLR) was commissioned by Mainfreight Distribution Pty Ltd (Mainfreight) to revise the Mainfreight Warehouse and Distribution Facility Operational Waste Management Plan (WMP) for the state significant development SSD 5746 (the Development) with the inclusion of the approved MOD 1.

SLR provided a historic WMP dated 20 February 2013 comprising the Construction and Operational phases of the Development. This WMP only covers the Operational phase of the development.

1.1 WMP Objective

The objectives of this operational WMP are to:

- Comply with the SSD 5746 conditions C36, C37 and C38
- Comply with applicable local government Development Control Plan guidance, and
- Encourage the minimisation of waste production and maximisation of resource recovery.

1.2 WMP Review

This WMP has been revised in accordance with the SSD 5746 Condition D6 requirement that all management plans be updated following modification to the development consent. This WMP is a working document and should be reviewed and updated:

- To remain compliant SSD 5746 Condition D6
- To remain consistent with waste legislation, regulations and guidelines
- Should changes be made to waste and recycling management or
- To take advantage of new technologies and methods for waste or recycling management.

WMP amendments, and cause for the changes should be documented by the building management as part of the review process. Copies of the original and all future versions are to be retained by building management.

2 Site Identification

The Mainfreight Warehouse and Distribution Facility (the Site) is located at 30 - 50 Yarrawa Street, Prestons, NSW 2170. The site is within the local government area of Liverpool City Council (Council) and comprises the property titles (**Figure 1**):

- Lot 101 on DP 1117691
- Lot 102 on DP 1117691, and
- Lot 2 on DP 28729.



Figure 1 Site location

3 Requirements

3.1 SSD 5746 Waste Management Conditions

The SSD 5746 development consent stipulated three waste management specific conditions C36, C37 and C38.

In accord with SSD 5746 Condition C36, the Applicant (Mainfreight) must ensure all operational waste is stored, handled and disposed of in compliance with the NSW EPA's Waste Classification Guidelines and disposed of at a lawfully licensed facility.

The waste management SSD 5746 Condition C37 requires the Waste Management Plan to:

- a. *Be prepared in consultation with the EPA by a suitably qualified and experienced expert whose*
- b. *Appointment has been endorsed by the Director-General*
- c. *Be approved by the Director-General prior to commencement of operations*
- d. *Detail the type and quantity of waste to be generated by the operation of the development*
- e. *Detail the materials to be reused or recycled, either on or off-site; and*
- f. *Detail the procedures for handling, storage, collection of recycling and disposal of waste.*

For the life of the development, Condition 38 of the SSD 5746 requires the Applicant to:

- a. *Monitor the amount of waste generated by the development*

- b. *Investigate ways to minimise waste generated by the development, and*
- c. *Implement reasonable and feasible measures to minimise waste generated by the development to the satisfaction of the Director-General.*

3.2 Council Waste Management Requirements

Requirements for waste management in new commercial and / or industrial developments in Council's jurisdiction are outlined in Part 1 of the Liverpool Development Control Plan 2008 (DCP), *General Controls for all Development*, and Part 7 *Development in Industrial Areas*.

The DCP requires the operational WMP to:

- Predicted types of generated waste, and estimated volumes or weights of each; and
- List reuse, recycling and disposal options for all likely waste types generated.

Council's DCP Part 1, Section 25 – *Waste Disposal and Re-use Facilities* stipulates each waste management area should be designed to ensure:

- Sufficient housing for the agreed number of bins as a consent condition
- Sufficient space for user access, bins, and manoeuvring of bins
- Storage and collection of waste and recyclables is easily and safely accessible for tenanted users, cleaners and collection contractors
- Collection on a level area less than 5% (1V:20H) gradient, and away from ramps and steps
- Collection servicing vehicles can efficiently and effectively service the development without reversing
- Compatibility with collection servicing vehicle dimensions, such as height, width and turning radius
- Distance between bin collection and storage is less than 15 metres, if applicable
- It is located to minimise noise impacts during use and collection
- It is well ventilated
- It is constructed using materials compatible with the proposed and adjoining development(s)
- Adequate lighting for safe use after dark
- It has a hose cock and a sewer drainage point in or adjacent to the storage area
- The hose cock does not impede or protrude into bin storage space
- A fine grade drain cover is sufficiently installed to prevent coarse pollutants from entering the sewer
- Signage:
 - Is in English and all other applicable languages
 - Includes illustrative graphics for at least half of the sign
 - Is posted in all waste management areas
 - Clearly identify the purpose and content of all bins, specifically what can be recycled
 - Indicates the area is to be maintained, tidy and clean
 - Displays a telephone number to arrange for bulky waste disposal.

Council's DCP Part 7, Section 6 - *Building Design, Streetscape and Layout* requires commercial or industrial service areas to be:

- Located away from principal street frontages, and
- Screened from view.

Furthermore, Part 7, Section 10 - *Site Services* stipulates:

- The owner must provide their own waste management services, and
- Waste management equipment must not be visible from the street.

4 Better Practice for Waste Management and Recycling

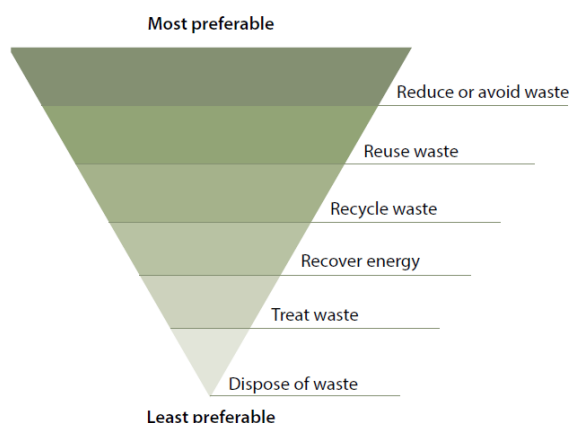
4.1 Waste Management Hierarchy

This WMP has been prepared in line with the waste management hierarchy (**Figure 2**), which summarises the objectives of the *Waste Avoidance and Resource Recovery Act 2001*.

The waste management hierarchy comprises the following principles, from most to least preferable with respect to waste minimisation:

1. Waste **avoidance**, through prevention or reduction of waste generation. Waste avoidance can be achieved through better design and purchasing selection.
2. Waste **reuse**, without substantially changing the form of the waste.
3. Waste **recycling**, through treatment of waste to produce new products.
4. Energy **recovery**, through processing of residual waste materials.
5. Waste **treatment**; through treatment to reduce environmental and health risks.
6. Waste **disposal**, in a manner that causes the least harm to the natural environment.

Figure 2 Waste management hierarchy



Source: NSW EPA (2014) NSW Waste Avoidance and Resource Recovery Strategy 2014-2021.

4.2 Benefits of Adopting Better Practice

Adopting better practice principles in waste minimisation offers significant benefits for organisations, stakeholders and the wider community. Benefits from better practice waste minimisation include:

- Enhanced social and environmental reputation of an organisation.
- Reduced consumption of non-renewable resources.
- Reduced pollution generated from materials manufacturing and waste treatment.
- Reduced financial burden associated with waste disposal.
- Opportunities for additional revenue streams through beneficial reuse.

5 Project Description

SLR understands Development Consent SSD 5746 was granted on 9 August 2013 by the Department of Planning and Environment. On 27 May 2014 a SSD 5746 MOD 1 was approved. The MOD 1 included:

- Modification to the floor area in Condition B5(a) to include the storage area and office floor space
- Class 2.1 Dangerous Goods (DGs) on site storage quantity increase (Condition B6), and
- Deletion of the restriction on heavy vehicle movements and associated loading and unloading to enable 24-hour operations (Condition C27).

A second modification (MOD 2) has been submitted and is in review at this time. MOD 2 is to:

- Increase the quantity of Class 9 DGs, and
- Include storage of Class 6.1 DGs.

The existing Mainfreight Warehouse and Distribution Facility consist of two warehouse buildings connected by a breezeway, with provision of dock operations, office area and amenities.

6 Operational Waste Management

Ineffective waste management for commercial premises can lead to environmental pollution, offensive odours, litter, attraction of vermin and occupational safety and hygiene issues.

Effective waste management reduces costs through the reuse of resources and minimisation of fees associated with removal, transportation and disposal of waste, and can improve environmental outcomes.

Effective waste management is achieved through the implementation of a WMP for the operational phase of a development. Council has a target of working towards the NSW State commercial and industrial waste resource recovery rate of 70% by 2021. The information in the following section is intended to contribute to achieving Council's recycling target.

6.1 Waste Types, Classifications and Management Options

Operation of the Development will generate the following broad waste streams:

- Packaging waste
- Office waste
- Amenity wastes, and
- Maintenance waste.

Although the Development is approved to temporarily store certain dangerous goods including aerosols, acidic soils and liquids and alkali liquids, these materials are not anticipated to generate waste while onsite except in the event of a spill.

Potential waste types, classifications and recommended method of management are provided in **Table 1**.

For further information on how to determine a waste's classification, refer to the NSW EPA's *Waste Classification Guidelines* (2014).

Table 1 Potential waste type, classification and management

Waste Types	NSW EPA Classification	Onsite processing	Re-use or Donate	Offsite Recycle	Offsite Disposal	Additional Information
General						
Batteries	Hazardous waste			●		http://www.batteryrecycling.org.au/home or take to Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool
Bulky polystyrene	General solid (non-putrescible) waste			●	●	Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool or collection by a waste contractor
Cardboard, bulky cardboard boxes	General solid (non-putrescible) waste			●		Collection by a waste contractor
Clean office paper	General solid (non-putrescible) waste			●		Collection by a waste contractor
Electronic waste (e-waste)	Hazardous waste			●		Ensure all personal data is deleted from each device before drop-off. Take to Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool. Alternatively, ● Donate http://reusefulproject.org/ ● Donate https://asylumseekerscentre.org.au/laptop-donation/ ● Contact Officeworks or search for the nearest recycling location https://recyclingnearyou.com.au/computers/WoollahraNSW, https://mri.com.au/dropzone/ or http://techcollect.com.au/ ● Consider https://reversegarbage.org.au/ ● Consider https://itewaste.com.au/
Food waste	General solid (putrescible) waste	●	●	●		Donate through http://www.ozharvest.org/ , https://www.foodbank.org.au/ , https://www.secondbite.org/ or https://www.exodusfoundation.org.au/ Alternatively, consider onsite management using a system like Pulpmaster or an ORCA Green Machine.

Waste Types	NSW EPA Classification	Onsite processing	Re-use or Donate	Offsite Recycle	Offsite Disposal	Additional Information
Furniture	General solid (non-putrescible) waste		●	●		The following locations accept a variety of furniture and household items for repair and resale: ● Bower www.bower.org.au (02) 9568 6280 ● The Salvation Army www.salvos.org.au 13 72 58 ● St Vincent de Paul Society www.vinnies.org.au (02) 9387 7088
General garbage, including non-recyclable plastics	General solid (putrescible and non-putrescible) waste				●	Collection by a waste contractor
Mobile Phones	Hazardous waste		●	●		Ensure all personal data is deleted from each device before drop-off search https://www.mobilemuster.com.au/ for the nearest recycling location or take to Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool
Printer toners and ink cartridges	Hazardous waste			●		Free disposal box or bags and pickup service exists for printer toners and ink cartridges; search https://cartridges.planetark.org/ or http://www.cartcollect.com.au/ . Alternatively, take to Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool or a participating Australia Post or Harvey Norman outlet for recycling. See https://www.recyclingnearyou.com.au/ for more information
Recyclable beverage containers, aluminium cans, glass and plastic bottles	General solid (non-putrescible) waste		●	●		Cash refund, digital payment, in-store credit or a charity donation for eligible containers in NSW, https://returnandearn.org.au/
Soft Plastic	General solid (non-putrescible) waste			●		Take to participating Coles and Woolworths store or Penrith Community Recycling Centre
Stationery	General solid (non-putrescible) waste			●	●	Search https://www.terracycle.com.au/en-AU/zero_waste_boxes/office-supplies , https://www.greencollect.org/#home-3 , https://recyclingnearyou.com.au/business/14935 , or https://recyclingnearyou.com.au/community-recycling-initiatives/
Wooden crates and pallets	General solid (non-putrescible) waste		●	●	●	Return to supplier or collection by a recycling contractor

Waste Types	NSW EPA Classification	Onsite processing	Re-use or Donate	Offsite Recycle	Offsite Disposal	Additional Information
Maintenance						
Air-conditioning parts and filters	General solid (non-putrescible) waste		●	●		Contact Liverpool City's Community Recycling Centre for acceptable metals and e-wastes
Cleaning chemicals, solvents, area wash downs, empty oil or paint drums, chemical containers	Hazardous waste if containers used to store Dangerous Goods (Class 1, 3, 4, 5 or 8) and residues have not been removed by washing or vacuuming. General solid (non-putrescible) waste if containers cleaned by washing or vacuuming.			●	●	Paints can be taken to Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool. Alternatively, check the next Chemical Clean Out event, https://www.epa.nsw.gov.au/your-environment/recycling-and-reuse/household-recycling-overview/find-crcs-or-hcco Note: Transport to comply with the transport of Dangerous Goods Code applies in preparation for off-site recycling or disposal at licensed facility. Discharge to sewer likely to be subject to Trade Waste Agreement with Sydney Water.
Glass other than containers	General solid (non-putrescible) waste			●		Contact Liverpool City' Council
Light bulbs and fluorescent tubes	Hazardous waste			●		Broken bulbs and tubes are not recyclable, if broken seal in plastic bag and dispose in general waste. If bulbs intact, take to the take to Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool. Alternatively, see: - FluoroCycle http://www.fluorocycle.org.au/ http://www.environment.gov.au/settlements/waste/lamp-mercury.html
Spent smoke detectors ¹	General solid (non-putrescible) waste; or Hazardous waste (some commercial varieties)			●		Take to Liverpool City Council's Community Recycling Centre at 99 Rose St, Liverpool or contact ARPANSA for more information, http://www.arpansa.gov.au/radiationprotection/factsheets/is_smokedetector.cfm

¹ When more than 10 smoke alarms (particularly americium-241 sources) are collected for bulk disposal, the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) stipulates to treat as radioactive waste and the National Health and Medical Research Council's Code of practice requirements of near-surface disposal of radioactive waste in Australia (1992) must be met.

6.2 Waste Quantities

Based on the information received by email correspondence from the Applicant on 30 November 2018, the approximate waste quantities produced by the Development are shown in **Table 2**.

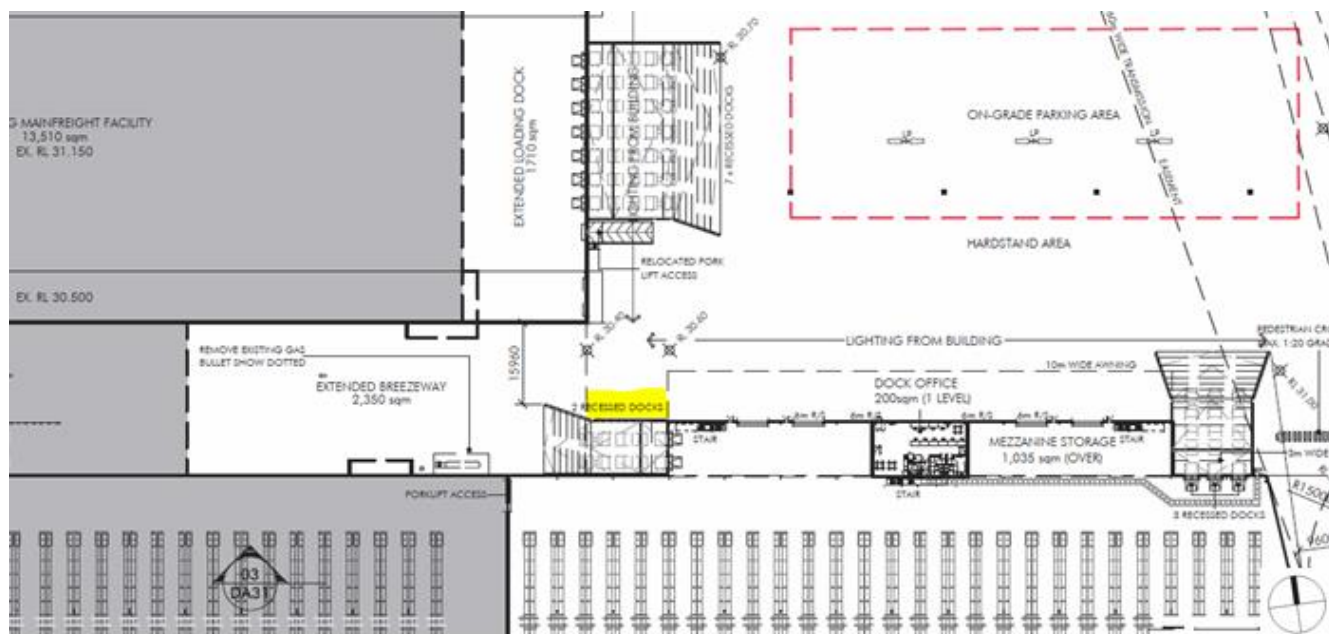
Table 2 Approximate waste quantities of the Development

Waste Stream	Bin Size	Collection Frequency
General waste	1 x 25 m ³ bin	Twice weekly with approximately two tonne general waste per collection
	4 x 3 m ³ bins	n/a, emptied into 25 m ³ bin
Recycling, plastics and cardboard	6 x 1,200 L bins	As required
	20 x 240 L bins	n/a, emptied into 4.5 m ³ bins
	6 x 4.5 m ³ bins	Collected daily
	7 x tippler bins	n/a, emptied into 4.5 m ³ bins

SLR understands the Applicant intends to investigate the introduction of additional waste management equipment such as balers and / or compactors. SLR recommends a waste audit to determine the most efficient method of minimising general waste and maximising material recovery for recycling from the Development.

6.3 Waste Collection Area

Waste and recyclables will be collection from the designated waste collection area (**Figure 3**).

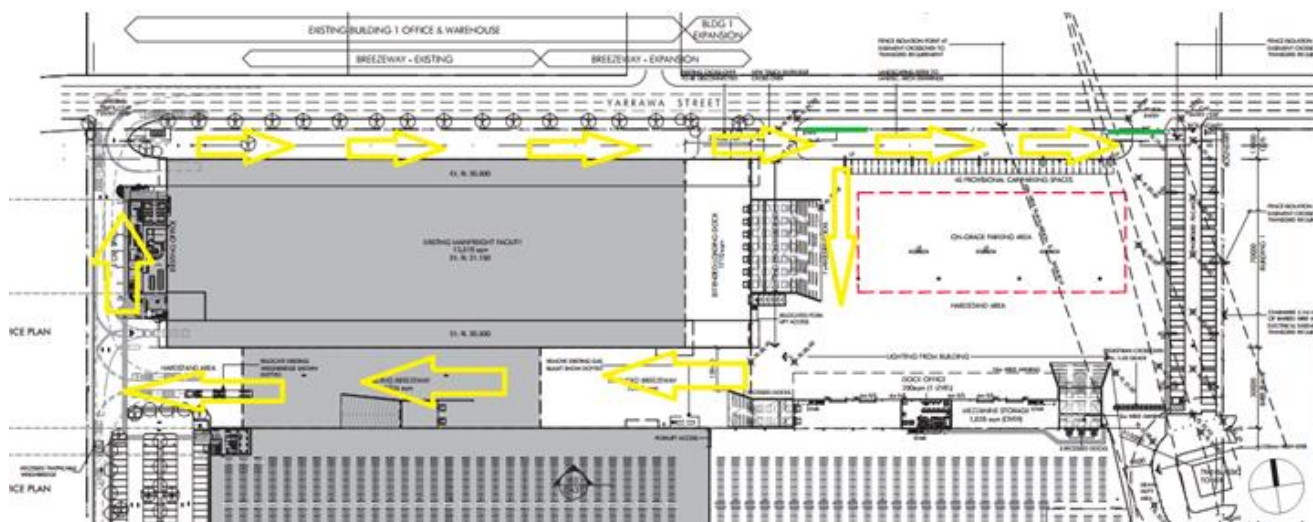


Adapted from Nettletontribe Ground Floor / Site Plan 4167_DA01 dated 5 July 2013

Figure 3 Waste collection area highlighted in yellow

If possible, waste collection should not coincide with peak operational or other delivery schedules. The waste collection area should not interfere with operational vehicle movements.

As indicated in **Figure 4**, the waste collection vehicle enters the Development and travels in a clockwise direction, exiting the Development in a forward direction.



Adapted from Nettletontribe Ground Floor / Site Plan 4167_DA01 dated 5 July 2013

Figure 4 Waste collection vehicle movements

Refer to **Appendix A** for the Traffic Management Plan.

6.4 Waste Avoidance, Re-use and Recycling

6.4.1 Waste Avoidance

Waste avoidance measures may include:

- Provision of take-back services to clients to reduce waste further along the supply chain.
- Re-work or re-packaging of products prior to local distribution to reduce waste.
- Review of packaging design to reduce waste but maintain 'fit for purpose'.
- Providing ceramic cups, mugs, crockery and cutlery rather than disposable items.
- Presenting all waste reduction initiatives to staff as part of their induction program, and
- Investigating leased office equipment and machinery rather than purchase and disposal.

6.4.2 Re-use

Possible re-use opportunities include:

- Establish systems with in-house and supply chain stakeholders to transport products in re-useable packaging where possible

6.4.3 Recycling

Possible recycling opportunities include:

- Collecting and recycling e-waste.
- Plastic stretch wrapping and general soft plastics collection with a baler for ease of recycling.
- Flatten or bale cardboard to reduce number of bales or bin lifts required.
- Paper recycling trays provided in office areas for scrap paper collection and recycling.
- Printer toners and ink cartridges are collected in allocated bins for appropriate contractor recycling.
- Development of 'buy recycled' purchasing policy, and
- Providing recycling collections within each of the offices, for example, paper, plastics, cans and glass.

6.5 Signage

Education and communication must be regular and ongoing to overcome the transient nature of contractors and visitors. Signage is recommended to:

- Be clearly visible if a roller shutter is installed on the garbage room. The sign should stipulate that the door is closed at all times when not in use, as a bin theft prevention measure.
- Be clear and concise with applicable warning signs, such as "NO STANDING" and "DANGER", on external walls of the garbage room where bin collection is to be conducted.
- Correctly label all garbage and recycling bins at all times.
- Indicate the location of, and directions to, waste storage areas.
- Identify all potential hazards or dangers associated with the waste facilities; and
- Display applicable emergency contact information in case there are any issues with the waste and recycling systems or services.

Signs approved by the NSW EPA² for labelling of waste materials are available online and should be used as applicable. **Figure 5** below show a selection of exemplar signs prepared by NSW EPA for ongoing operation.



Figure 5 Examples of NSW EPA operational waste labels for bins and colour coding for storage areas

² NSW EPA waste signs / posters <http://www.epa.nsw.gov.au/wastetools/signs-posters-symbols.htm>

The design and use of safety signs for waste rooms and enclosures should comply with Australian Standard AS 1319 Safety Signs for the Occupational Environment.

6.6 Dangerous and / or Hazardous Goods and Liquid Waste Storage

Dangerous goods stores and associated waste areas should comply with relevant Australian Standards as listed in the Safe Work Australia *Model Code of Practice: Managing risks of hazardous chemicals in the workplace*³. In addition, SafeWork NSW notification may need to be provided where manifest levels are exceeded. Refer to SafeWork's hazardous chemicals notifications⁴ for further information.

All maintenance chemicals, oils and fuels including associated wastes should be stored separately in an appropriately bunded, well-ventilated area with a drain grease trap and allow sufficient space for handling and storage in accordance with Australian Standard AS 1940:20172004 *The Storage and Handling of Flammable and Combustible Liquids* and relevant development consent conditions.

Liquid, semi-liquids or moist substances will not be placed in approved waste containers, unless securely wrapped or contained to prevent the substance from leaking.

Any liquid wastes or dangerous goods wastes generated onsite, for example, due to spills, damage or leakage of containment, should be promptly cleaned up by suitably trained staff under management direction and disposed of by a qualified contractor of an appropriately licensed disposal facility.

No liquid wastes or wash down waters should be disposed of via the stormwater drainage system. Wastewater storage tanks, including stormwater collection tanks, if applicable, should be carefully monitored to ensure overflow does not occur.

Refer the NSW EPA Hazardous Waste Storage and Processing (2017)⁵ for detailed liquid waste guidance.

6.7 Contract Clauses

Waste collection contracts and cleaning contracts should include clauses relating to waste servicing requirements. Lease agreements should also outline and enforce proper use of waste facilities.

Refer to Appendix H of the NSW EPA's Better Practice Guidelines (2012) for example clauses.

6.8 Monitoring and Reporting

Monitoring is recommended to ensure waste and recycling management arrangements and provisions are functioning adequately and feasibly for the Development. Monitoring of bins and bin storage areas should be conducted by the building manager, at minimum, every six months, to ensure waste is being managed appropriately.

Any deficiencies identified in the waste management system, including, but not limited to, unexpected waste quantities, should be rectified by the building manager as soon as practicable.

³ <https://www.safeworkaustralia.gov.au/doc/model-code-practice-managing-risks-hazardous-chemicals-workplace>

⁴ <https://www.safework.nsw.gov.au/notify-safework/dangerous-goods-notifications>

⁵ <https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/waste/liquid-waste-industry-guidance160718.pdf>

The Waste Data File is recommended to be maintained by the building manager. This may be a file or folder containing the Waste Management Plan together with waste quantities and records such as waste receipts and / or dockets of waste disposal and recycling. A Waste Data File is required to be available to regulatory authorities, for example, Council, NSW EPA and SafeWork NSW, for all demolition and construction works, and is recommended to be maintained for ongoing operations.

Refer to the NSW EPA Waste Producers' Tracking Responsibilities⁶ guidance for further details on hazardous waste tracking and transporting requirements.

6.9 Roles and Responsibilities

It is the responsibility of the building manager to implement this WMP and a responsibility of all staff, contractors and visitors to follow the waste management procedures set out by the WMP. A summary of recommended roles and responsibilities is provided in **Table 3**.

Table 3 Suggested roles and responsibilities

Responsible Person	General Tasks
Building Manager	Ensure the WMP is implemented throughout the life of the operation.
	Update the WMP as needed to ensure the plan remains applicable.
	Management of waste and recycling collections by Council and / or contractors.
	Conduct regular condition and cleanliness inspections of bins and waste storage areas.
	Organise internally and externally bin cleaning at least every three months or as required.
	Organise maintenance requirements for the garbage area as required.
	Manage any complaints and non-compliances reported through waste audits and so forth.
	Ensure effective signage, communication and education is provided to alert new tenants, building management staff, contractors and visitors about the provisions of this WMP.
	Ongoing education on correct source separation and waste management at least every three months.
	Monitor and maintain signage to ensure it remains clean, clear and applicable.
	Manage all waste equipment, cleaning requirements, waste transfer and collection arrangements.
	Manage unexpected waste quantities to mitigate waste overflow in storage areas.
	Ensure all waste compactors or balers, if applicable, are maintained and operational.
Cleaners or Caretaker	Monitor bins to ensure no overfilling occurs.
	Ensure bins and waste storage areas are kept tidy and clean.
	Transfer waste to waste storage rooms as required.
	Clean bins and waste storage areas per Building Manager direction.
	As applicable, maintain and operate balers and compactors, ensuring no overfilling occurs.
Staff, Contractors and Visitors	Adhere to all waste management directions given by the Building Manager.

⁶ <https://www.epa.nsw.gov.au/your-environment/waste/tracking-transporting-hazardous-waste> and <https://www.epa.nsw.gov.au/your-environment/waste/tracking-transporting-hazardous-waste/industry-responsibilities-tracking-waste/waste-producers-tracking-responsibilities>

7 Closure

This report has been prepared by SLR Consulting Australia Pty Ltd with all information reported based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

Table 4 outlines the applicable sections on this WMP that address each of the SSD 5746 Waste Management Conditions.

Table 4 SSD 5746 waste management conditions

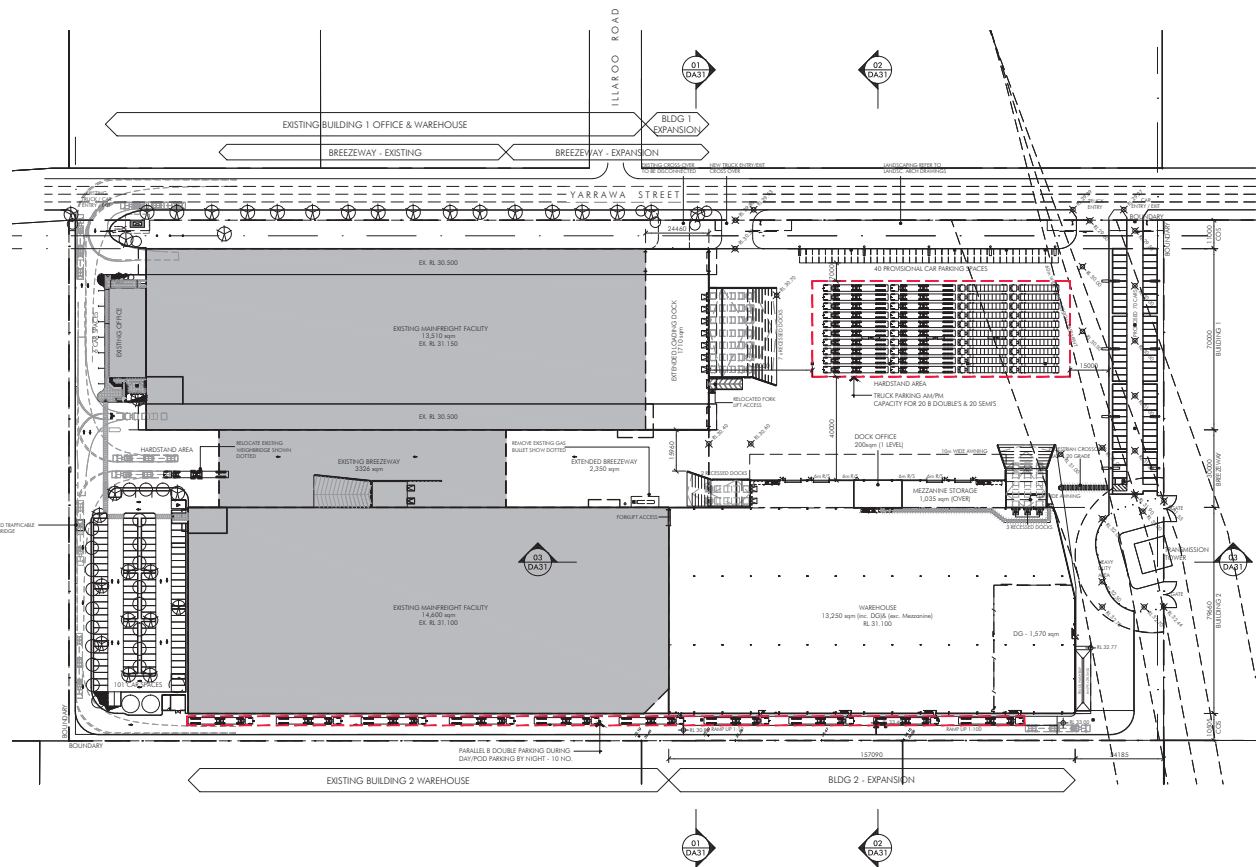
Waste Management SSD 5746 Condition	Condition Details	Response
C36	The Applicant (Mainfreight) must ensure all operational waste is stored, handled and disposed of in compliance with the NSW EPA's Waste Classification Guidelines and disposed of at a lawfully licensed facility.	Applicant to advise
C37	Be prepared in consultation with the NSW EPA by a suitably qualified and experienced expert whose	This WMP has been SLR Consulting Australia Pty Ltd
C37	Appointment has been endorsed by the Director-General	Applicant to advise
C37	Be approved by the Director-General prior to commencement of operations	Applicant to advise
C37	Detail the type and quantity of waste to be generated by the operation of the development	Refer to Section 6.1 and 6.2 of this WMP
C37	Detail the materials to be reused or recycled, either on or off-site	Refer to Section 6.1 this WMP
C37	Detail the procedures for handling, storage, collection of recycling and disposal of waste	Refer to Section 6.3 and 6.9 this WMP
C38	Monitor the amount of waste generated by the development	Refer to Section 6.8 this WMP
C38	Investigate ways to minimise waste generated by the development	Refer to Section 6.2, 6.4 and 6.8 this WMP
C38	Implement reasonable and feasible measures to minimise waste generated by the development to the satisfaction of the Director-General	Refer to Section 6.1, 6.5, 6.8 and 6.9 this WMP

This report is for the exclusive use of the Applicant. No warranties or guarantees are expressed or should be inferred by any third parties. This report may not be used by other parties without SLR's written consent.

SLR disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

APPENDIX A

Architectural Drawings



GOODMAN



MAINFREIGHT FACILITY - PROPOSED EXPANSION PRESTONS DISTRIBUTION CENTRE 26 YARRA STREET, PRESTONS

L17, 401 Camberwell Street, Sydney NSW 2000
T 02 9230 7400 F

NO.	REVISION	DATE
1	ISSUED FOR TENDERS	21/07/21
2	FOR INFORMATION	21/07/21
3	FOR INFORMATION	21/07/21
4	FOR INFORMATION	21/07/21
5	FOR INFORMATION	21/07/21
6	FOR INFORMATION	21/07/21
7	FOR INFORMATION	21/07/21
8	FOR INFORMATION	21/07/21
9	FOR INFORMATION	21/07/21
10	FOR INFORMATION	21/07/21

traffic management plan
1:750 (A3) / 1:1500 (A3)
4167_DA061
July 2021



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