

APP Corporation



Environmental Impact Statement

Minto Resource Recovery Facility

STATE SIGNIFICANT DEVELOPMENT APPLICATION (SSD 7462)

Date: May 2017

Statement of Validity

Prepared under Part 4, Division 4.1 of the Environmental Planning and Assessment Act, 1979 (as amended)
Environmental Impact Statement prepared by

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In respect of SSD 7462 – Minto Waste Resource Recovery Facility

Environmental Impact Statement

Applicant name Skylife Properties Pty Ltd
Applicant address PO Box 114
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Site Legal Description: Lot 1, DP1013852

Certificate I certify that I have prepared the content of this Environmental Impact Statement
and to the best of my knowledge:

- It is in accordance with the *Environmental Planning and Assessment Act, 1979* and *Environmental Planning and Assessment Regulation, 2000*.
- It is true in all material particulars and does not, by its presentation or omission of information, materially mislead.

Signature



Name Karie Bradfield
 Project Director – Environment & Planning

Date 02 / 05 / 2017

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Abbreviations and Acronyms

AEC	Area of Environmental Concern
AHD	Australian Height Datum
APP	APP Corporation
AQIA	Air Quality Impact Assessment
Applicant	Skylife Properties Pty Ltd
C&I waste	Commercial and industrial waste
C&D waste	Construction and demolition waste
CLM Act	<i>Contaminated Lands Management Act, 1997</i>
CNMP	Construction Noise Management Plan
CEMP	Construction Environmental Management Plan
DG	Dangerous Goods
DPE	Department of Planning and Environment
EIS	Environmental Impact Statement
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act, 1999</i>
EP&A Act	<i>Environmental Planning and Assessment Act, 1979</i>
EPA Regs	<i>Environmental Planning and Assessment Regulation, 2000</i>
EPL	Environment Protection Licence
GHG	Greenhouse Gas
CLEP	Campbelltown LEP 2015
INP	Industrial Noise Policy
ICNG	Interim Construction Noise Guideline, 2009
ISEPP	<i>State Environmental Planning Policy (Infrastructure) 2007</i>
LGA	Local Government Area
NIA	Noise and Vibration Impact Assessment
OEH	Office of Environment and Heritage
OEMP	Operations Environmental Management Plan
PM10	Particles with an aerodynamic diameter of 10 microns or less
PM2.5	Particles with an aerodynamic diameter of 2.5 microns or less
POEO Act	<i>Protection of the Environment Operations Act 1997</i>
POEO General Regs	<i>Protection of the Environment Operations (General) Regulation, 2009</i>
POEO Waste Regs	<i>Protection of the Environment Operations (Waste) Regulation, 2014.</i>
PCA	Principle Certifying Authority
PIRMP	Pollution Incident Response Management Plan
RBL	Rating Background Level
RMS	Roads and Maritime Services
RNP	Road Noise Policy
RRF	Resource Recovery Facility
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SEPP 33	<i>State Environmental Planning Policy 33 – Hazardous and Offensive Development</i>
SEPP 55	<i>State Environmental Planning Policy 55 – Remediation of Land</i>
SEPP State and Regional Development	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>

SSD	State Significant Development
The Site	13 Pembury Road, Minto
TIA	Transport Impact Assessment
TSC Act	<i>Threatened Species Conservation Act, 1995</i>
TSP	Total suspended particulates
VENM	Virgin excavated natural material
vpd	Vehicles per day
vph	Vehicles per hour
WARRS	<i>NSW Waste Avoidance and Resource Recovery Strategy 2014 – 21.</i>

Executive Summary

Purpose of this Report

This Environmental Impact Statement (EIS) is submitted to the Department of Planning and Environment in support of a State Significant Development Application for the proposed expansion of an existing resource recovery facility at 13 Pembury Road, Minto (Lot 1 on DP1013852) being the subject site. The expanded facility is expected to process up to 220,000 tonnes of non-putrescible waste per annum. Whilst processing activities will remain unchanged from the existing operation, the proposal seeks a new in-ground weighbridge, a 600kw electrical substation, site office, amenities block, relocation of an existing 30,000 litre fuel tank and 10 car parking spaces to facilitate the expanded operation.

This EIS has been prepared in accordance with the requirements of the *Environmental Planning and Assessment Act 1979* and the *Environmental Planning and Assessment Regulation 2000*, together with the Secretary's Environmental Assessment Requirements, issued for the project on 28 January 2016. In doing so, this report provides a comprehensive evaluation of the facility against the legislative and policy framework relevant to the site to determine the likely impacts of the project and provide mitigation measures where necessary.

Planning framework

The subject site is zoned IN1 General Industrial under the Campbelltown LEP 2015.

Division 23 of *State Environmental Planning Policy (Infrastructure) 2007* allows for the establishment and operation of a resource recovery facility on land in a prescribed zone such as IN1 General Industrial with development consent. The provisions of the SEPP prevail over the Campbelltown LEP 2015 in this regard. As such, the proposed development is permissible with development consent.

Under clause 8 of the State Environmental Planning Policy (State and Regional Development) 2011, development is declared to be State Significant Development for the purposes of the EP&A Act if, among other provisions, the development is specified in Schedule 1 or 2 of the State and Regional Development SEPP. Clause 23(3) of Schedule 1 of the State and Regional Development SEPP relates to waste and resource management facilities and makes provision for *development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste*.

It is proposed that the handling capacity of the existing facility be increased to 220,000 tonnes of waste per year and on this basis the proposal satisfies the criteria contained in Clause 23 in Schedule 1 of the State and Regional Development SEPP.

On 4 December 2015, APP on behalf of Minto Recycling Pty Ltd wrote to the Secretary of the Department of Planning and Environment and requested Secretary's Environmental Assessment Requirements (SEARs) to prepare an EIS for the expansion of the existing resource recovery facility at the subject site. This EIS fulfils the requirements issued by the Secretary on 28 January 2016, the *Environmental Planning and Assessment Act, 1979* and *Environmental Planning and Assessment Regulation, 2000*.

Background and Development Objectives

The site address is 13 Pembury Road, Minto and is legally described as Lot 1 in DP1013852. The site currently operates as a resource recovery facility, has an area of 8,957m² and contains improvements in the form of a processing building, storage building, tipping building, site office and amenities building, weighbridge, enclosed conveyor, external bin storage areas, heavy vehicle manoeuvring areas, 30,000 litre diesel fuel tank and light vehicle car parking areas.

The existing facility is operated by Minto Recycling Pty Ltd and is owned by Pembury Street Pty Ltd. The existing waste transfer use was approved on 14 December 2004. The DA approval was subsequently amended over the years to modify conditions ranging from reconfiguration of site facilities and fencing, and increasing waste capacity from 15,000t p/a to 30,000tp/a to improve the operational throughput.

A State Significant Development (SSD) approval would consolidate all consents under one approval. An Environmental Protection License (EPL20638) was issued by the Environmental Protection Authority on 25 November 2015 under the *Protection of the Environment Operations Act 1997* to regulate current operations. The EPL describes the types of waste which may be received at the facility and identifies activities permitted to be undertaken in relation to each waste type permitted on the site. The EPL also limits the amount of waste permitted on the premises at any one time to 7,500 tonnes and limits the overall quantity to be received and processed to 30,000 tonnes per annum.

In accordance with the DA approval and the EPL, the existing facility receives, separates and recycles suitable non-putrescible waste into different waste categories. Various products are then transferred to other facilities for reuse, further resource recovery or to a licensed landfill. Approximately 85% of waste received on-site is diverted from landfill.

The site is well positioned to service approved housing and infrastructure projects in the region. The facility would be capable of receiving and processing waste products to enable resource recovery and subsequent reuse elsewhere. It is expected that the facility will maintain or improve the percentage of waste which is diverted from landfill.

Project Overview

An SSD approval is sought to increase the processing capacity to 220,000 tonnes of waste annually. Given the current and predicted volumes of waste to be generated from local development, the opportunity has arisen to increase the operating capacity of the subject site to 220,000 tonnes per annum.

An SSD approval would allow for the timely and efficient handling, processing and recovery of waste at the Minto facility. Improvements to the site, which form part of this application and as detailed below, would also assist in increasing efficiency while minimising environmental impacts as assessed within this EIS.

The hours of operation for all activities associated with the facility are proposed to extend from 6:00am – 7:00pm Mondays to Saturdays to 6:00am – 10:00pm, Monday to Saturday.

Proposed Works

The development also seeks to:

- Construct a new in-ground weighbridge (20m x 3.5m) adjacent to the western property boundary for large trucks;
- Construct a new 600kw substation, install site office, and amenities block;
- Construct 10 car parking spaces;
- Relocate an existing 30,000 litre fuel tank; and
- Install an inground wheel wash.

Proposed Operations

The facility would continue to accept and process existing waste streams and other non-putrescible general solid waste which comprises mostly of:

- Wood Waste;
- Non-Chemical manufacturing waste (metal, timber, paper, ceramics, plastics, thermosets and composites);
- Asphalt waste;
- Soils;
- Paper and cardboard;
- Glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal;
- Household waste from municipal clean-up that does not contain food waste;
- Office and packaging waste that is not contaminated or mixed with any other type of waste;
- Building and demolition waste;
- Virgin excavated natural material; and
- Garden waste.

Other non-putrescible general solid waste types to be accepted on-site include:

- Waste classified as non-putrescible general solid waste;
- Waste pre-classified as non-putrescible general solid waste such as:
 - Foundry sand;
 - Household waste from residential clean-up;
 - Council clean-up materials from public, community and open space;
 - Waste that meets all conditions of a resource recovery order;
 - Any mixture of non-putrescible general solid waste types;
 - Bulky goods waste containing building de-fittings, fixtures and furniture;
 - Waste collection by or on behalf of Council's street sweepings;
 - Grit, sediment, litter, gross pollutants collected and removed from stormwater treatment devices and or stormwater management systems that have been dewatered so that they do not contain free liquids;
 - Grit and screenings from potable water and water reticulation plants that are:
 - Non-putrescible vegetative wastes; and
 - Cured concrete waste from a batch plant.

Unexpected finds of materials such as asbestos, tyres, batteries, gas bottles, fire extinguishers and food may be encountered from time to time. These materials would be handled in accordance with procedures and stored for lawful disposal.

Processing activities would continue to involve the separation of waste products to enable resource recovery.

Rejected waste would be taken from the site and transported to appropriately licensed facilities. The flow chart in **Figure 1** summarises the proposed processes to be undertaken on site for conforming waste streams.

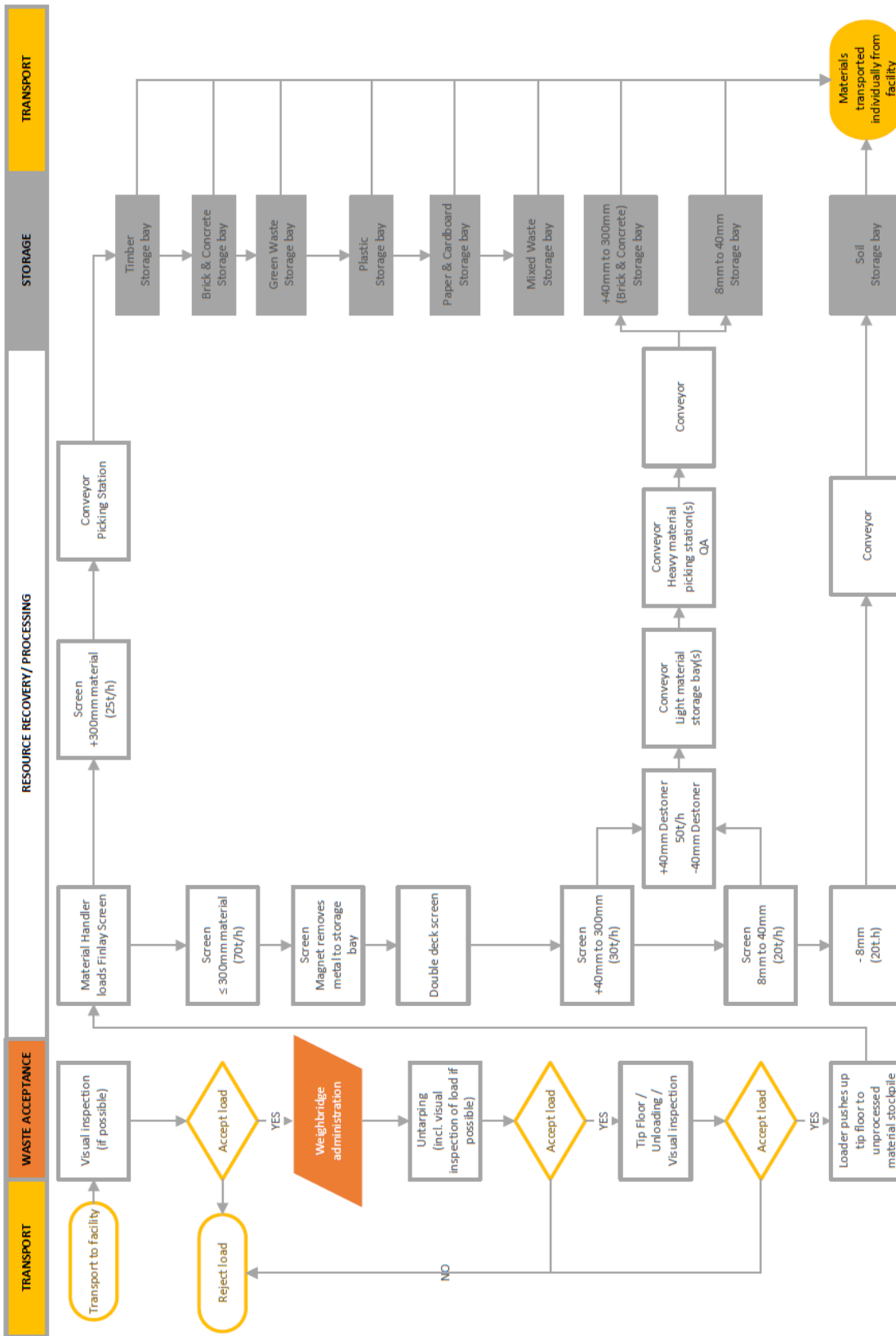


Figure 1 Minto Processing and Handling Flow Chart (source Minto Recycling Pty Ltd)

The proposed hours of operation are:

- Monday to Saturday: 6:00am to 10:00pm
- Sunday and Public Holidays: No operations

Consultation

During the preparation of the EIS, and in response to the consultation requirements stipulated in the SEARs, key stakeholders were identified and subsequently consulted. Key stakeholders engaged were:

- The local business and residential community through written notification and project website with details of the proposal;
- Campbelltown City Council;
- The Department of Planning and Environment (DPE);
- Environment Protection Authority (EPA); and
- Roads and Maritime Services (RMS).

The feedback from this exercise has informed the preparation of the EIS and proposed site operations. The outcome of the consultation process is discussed in more detail in Section 1.4 of this report.

Environmental Impacts

Detailed investigations of the subject site have demonstrated that the site is free of major physical constraints. This EIS and supporting technical investigations provide a detailed assessment of the baseline conditions and the potential environmental impact of the proposed development. The cumulative impacts and benefits likely to arise from operating capacity of up to 220,000 tonnes per annum are considered in this report. The EIS demonstrates that there is a demand for resource recovery facilities in the sub-region, the proposed development is suitable to its locality and would not result in adverse impacts to the environment and surrounding land uses with respect to:

- Stormwater runoff, soil contamination and flooding;
- Traffic, access and car parking;
- Noise and vibration;
- Hazards and dangerous goods;
- Visual impact;
- Air quality and odour impact;
- Greenhouse gas generation;
- Fire safety;
- Construction noise and vibration;
- Construction waste management; and
- Operational environmental management.

The site operator implements stringent environmental controls for the current facility. This EIS has assessed the environmental impacts from the proposed operation to be minimal. Notwithstanding this, further mitigation measures are proposed as part of the SSD application to ensure the increased through-put is managed efficiently with minimal environmental impacts.

Conclusion

This EIS provides a comprehensive response to the issued SEARs and the relevant legislation and policies applicable to the resource recovery facility at the subject site. The EIS has demonstrated that the predicted impacts of the proposal can be satisfactorily managed and mitigated.

The proponent is keen work with the NSW Government to not only achieve the Government's vision for Sydney by implementing the Plan for Growing Sydney (the Plan), but also by handling and managing waste efficiently and contributing towards employment and housing delivery. The Minto facility will also assist the NSW Government in meeting recycling targets set for the State and will meet the proposed 75% target mandated by the NSW EPA for any facility that receives more than 30,000 tonnes of C&D waste (EPA 2016).

An approval of this SSD application would assist the Government in achieving key objectives of the Plan by supporting a suitably located resource recovery facility which is capable of processing up to 220,000 tonnes of waste per annum. To achieve the objectives of the Plan, it is essential for facilities such as the proposed facility, to be given the necessary support and protection to allow for the effective diversion of waste from landfill.

Given the merits of the proposal, as outlined in the EIS, the proposed development is justified and warrants approval by the Minister for Planning and Environment or his delegate. Approval of the proposed development would have significant benefits to the local area and the State of NSW by allowing for waste to be processed in an efficient, safe and timely manner.

Subsequent to this discussion, the proponent has improved the design of the wheelwash and determined that an in-ground wheelwash would better suit the needs of the facility.

1. Introduction

This Environmental Impact Statement (EIS) has been prepared by APP Corporation Pty Limited (APP) on behalf of Skylife Properties Pty Ltd (the applicant). It is based on the architectural plans prepared by Dewcape Pty Ltd and stormwater plans prepared by Burgess, Arnott & Grava, supporting technical studies prepared by SLR Consulting Australia Pty Ltd and The Transport Planning Partnership, which are appended to this report as described in Section 1.2.

This EIS describes the site, its environs, the proposed development and provides an assessment of the proposal against the terms of the Secretary's Environmental Assessment Requirements (SEARs) dated 28 January 2016, and the relevant matters for consideration under the *Environmental Planning and Assessment Regulation 2000* (the Regulations) and *Environmental Planning and Assessment Act 1979* (the Act).

The development, the subject of this EIS, is SSD as defined under Division 4.1 of Part 4 of the Act.

The Minto resource recovery facility has implemented Work Health and Safety, Environment and Quality Management Systems (SEQ). The current operator of the site has certified management systems for:

- ISO 9001 - Quality Management Systems;
- ISO 14001 - Environmental Management Systems; and
- Australian / New Zealand Standards AS/NZ 4801 - Occupational Health and Safety.

In order to achieve these certifications, the facility and the SEQ management system must undergo independent external third party audits by qualified auditors annually. The systems are rigorous in their requirements and require assessment of risk associated with all activities, identification of control measures and procedures and documentation, training and implementation of all measures to remove, mitigate and manage the risks and controls.

1.1. Proposal Overview

Approval is sought to increase the processing capacity of the existing waste or resource recovery facility from 30,000 tonnes per annum to 220,000 tonnes per annum. An approval will supersede previous approvals issued over the site and provide a new suite of operating requirements and mitigation measures commensurate to the increased processing capacity. The facility would continue to process general solid waste (non-putrescible), as described in the *Waste Classification Guidelines, 2014*, prepared by the NSW Environment Protection Authority (EPA). The facility is defined as a resource recovery facility under Part 3, Division 23 of State Environmental Planning Policy (Infrastructure), 2007 (ISEPP).

SSD approval is sought for:

- processing 220,000 tonnes of waste per annum;
- a new in-ground weighbridge and wheel wash situated between Site Shed A and the western property boundary;
- a new 600kw electrical substation, a site office, amenities block;
- relocation of a 30,000 litre diesel fuel tank
- 10 car parking spaces with 7 provided within a new 118m² concrete hardstand area and a further 3 spaces at the site entry; ; and
- hours of operation from 6am -10pm Monday to Saturday.

1.2. Proposal Objectives

The existing Minto Resource Recovery Facility receives and processes waste at levels (30,000 tonnes per annum) which are significantly below the operating capacity of the plant and equipment and site as a whole. The primary objective of the proposal is to secure approval to allow for the better utilisation of the site and associated plant and equipment, to cater for increasing demand for processing of construction and demolition waste in the locality and across the broader Sydney metropolitan region.

The existing Minto Resource Recovery Facility receives and processes waste at levels (30,000 tonnes per annum) which are significantly below the operating capacity of the plant and equipment and site as a whole. The primary objective of the proposal is to secure approval to cater for an increasing demand for processing of construction and demolition waste in the locality and across the broader Sydney metropolitan region.

An approval will allow for the better utilisation of the site and associated plant and equipment by increasing the resource recovery capability of the site to assist in meeting state government resource recovery targets and to provide recycled materials back into the Sydney construction market. The proposal will also allow vehicle access and internal flows that maximise operational efficiency and user safety.

1.3. Project Team

The project team formed to prepare the EIS includes the following consultants:

Specialty	Consultant
Architecture	Dewcape Pty Ltd
Urban Planning	APP Corporation Pty Limited
Transport and Accessibility	The Transport Planning Partnership Pty Ltd
Survey	Spatial Technologies Pty Ltd
Air Quality, Odour and GHG	SLR Consulting
Water Cycle Management	SLR Consulting and Burgess, Arnott & Grava
Noise and vibration	SLR Consulting
Construction Noise and Vibration	SLR Consulting

Specialty	Consultant
Contamination	SLR Consulting
Fire Safety Study	SLR Consulting
Community Consultation	APP Corporation Pty Limited
SEPP 33 - PHA	SLR Consulting

1.4. Response to Secretary's Environmental Assessment Requirements

Table 1 identifies where each requirement has been addressed in the EIS and the accompanying technical studies.

A copy of the Secretary's Environmental Assessment Requirements is included at **Appendix A**.

Table 1: SEARs and locations in EIS

Requirement	Location in EIS
1. General Requirements	
<ul style="list-style-type: none"> the Environmental Impact Statement (EIS) for the development must meet the form and content requirements in clauses 6 and 7 of Schedule 2 of the <i>Environmental Planning and Assessment Regulation 2000</i>. 	Section 1 and Statement of Validity.
<ul style="list-style-type: none"> 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> (EP&A Act) including any reliance on existing use rights and/or planning approvals and how these will be consolidated; 	Section 2.2, 4.2
<ul style="list-style-type: none"> need for the proposed development; 	Section 3.1
<ul style="list-style-type: none"> justification for the proposed development 	Section 3.1 to Section 3.2
<ul style="list-style-type: none"> detail any reliance on existing use rights and/or planning approvals and how these will be consolidated. 	Section 4.1
<ul style="list-style-type: none"> likely staging of the development - including demolition, construction, and operational stage/s 	Section 4.1 and Section 4.2
<ul style="list-style-type: none"> likely interactions between the development and existing, approved and proposed operations in the vicinity of the site 	Section 2.3, Section 2.4 and Section 6.
<ul style="list-style-type: none"> plans of any proposed building works 	Section 4 and Appendix F
<ul style="list-style-type: none"> demonstrate that the site is suitable for the proposed use in accordance with <i>State Environmental Planning Policy No 55 – Remediation of Land</i>; 	Section 5.3.4, Section 6.7 and Appendix J (Phase 1 Investigation)
<ul style="list-style-type: none"> consideration of all relevant environmental planning instruments, including identification and justification of any inconsistencies with these instruments; 	Section 5.3
<ul style="list-style-type: none"> consideration of issues discussed in Attachment 2 (public authority responses to key issues) 	Section 1.4
<ul style="list-style-type: none"> risk assessment of the potential environmental impacts of the development, identifying the key issues for further assessment; 	Section 2.3, Section 2.4, and Section 6.

Requirement	Location in EIS
<ul style="list-style-type: none"> detailed assessment of the key issues specified below, and any other significant issues identified in this risk assessment, which includes: <ul style="list-style-type: none"> 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; 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; and 	<p>Section 2, Section 6, Appendix G, I, J, K, M & N Section 5.1 and Section 6</p> <p>Summary provided in Section 6.11</p>
<ul style="list-style-type: none"> a consolidated summary of all the proposed environmental management and monitoring measures, highlighting commitments included in the EIS. 	Section 4.12 and Section 6.11
<ul style="list-style-type: none"> 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 proposal, including details of all assumptions and components from which the CIV calculation is derived; 	Section 4 and Appendix I
<ul style="list-style-type: none"> a close estimate of the jobs that will be created by the development during the construction and operational phases of the development; and 	Section 4.1
<ul style="list-style-type: none"> certification that the information provided is accurate at the date of preparation. 	Section 4.1
2. Key Issue – Waste Management	
<ul style="list-style-type: none"> a description of the waste streams that would be accepted at the site including the maximum daily, weekly and annual throughputs and the maximum size for stockpiles. 	Section 4.2
<ul style="list-style-type: none"> a description of waste processing operations, including a description of the technology to be installed, resource outputs, and the quality control measures that would be implemented. 	Section 4.2
<ul style="list-style-type: none"> details of how waste would be stored and handled on site, and transported to and from the site including details of how the receipt of non-conforming waste would be dealt with. 	Section 4.2
<ul style="list-style-type: none"> the measures that would be implemented to ensure that the development is consistent with the aims, objectives and guidance in the <i>NSW Waste Avoidance and Resource Recovery Strategy 2014-2021</i>. 	Section 4.2 and Section 5.3.8
3. Key Issue – Traffic and Transport	
<ul style="list-style-type: none"> details of all traffic types and volumes likely to be generated during construction and operation, including a description of haul routes. 	Section 4.3 and Appendix G (TIA)
<ul style="list-style-type: none"> an assessment of the predicted impacts of this traffic on road safety and the capacity of the road network, including consideration of cumulative traffic impacts at key intersections using SIDRA or similar traffic model. 	Section 6.9 and Appendix G (TIA)
<ul style="list-style-type: none"> detailed plans of the proposed layout of the internal road network and parking on site in accordance with the relevant Australian Standards 	Section 6.7.3 and Appendix F (Arch Plans)

Requirement	Location in EIS
<ul style="list-style-type: none"> plans of any proposed road upgrades, infrastructure works or new roads required for the development. 	Section 6.9 and Appendix G (TIA)
4. Key Issue – Air Quality and Odour	
<ul style="list-style-type: none"> a qualitative assessment of the potential air quality, dust and odour impacts of the development in accordance with relevant Environment Protection Authority Guidelines 	Section 6.3 and Appendix M
<ul style="list-style-type: none"> the details of buildings and air handling systems and strong justification for any material handling, processing or stockpiling external to a building 	Section 4.1
<ul style="list-style-type: none"> a greenhouse gas assessment 	Section 6.4.1 and Appendix M (AQIA & GHG)
<ul style="list-style-type: none"> details of proposed mitigation, management and monitoring measures 	Section 6.3
5. Key Issue – Noise and Vibration	
<ul style="list-style-type: none"> a quantitative assessment of potential construction, operational and transport noise and vibration impacts in accordance with relevant Environment Protection Authority guidelines 	Section 6.2 and Appendix L (NIA)
<ul style="list-style-type: none"> details and justification of the proposed noise mitigation and monitoring measures. 	Section 6.2
6. Key Issue – Soil and Water	
<ul style="list-style-type: none"> a description of water and soil resources, topography, hydrology, watercourses and riparian lands on or nearby to the site 	Section 2 and Appendix I (S & W Assessment)
<ul style="list-style-type: none"> a detailed site water balance, including identification of water requirements for the life of the project, measures that would be implemented to ensure an adequate and secure water supply is available for the proposal and a detailed description of the measures to minimise the water use at the site 	Appendix I
<ul style="list-style-type: none"> details of stormwater/wastewater/leachate management systems including the capacity of onsite detention systems, and measures to treat, reuse or dispose of water 	Section 6.6 and Appendix I
<ul style="list-style-type: none"> a description of erosion and sediment controls 	Appendix I
<ul style="list-style-type: none"> an assessment of potential impacts to soil and water resources, topography, drainage lines, watercourses and riparian lands on or nearby to the site 	Appendix 6.6, Appendix I
<ul style="list-style-type: none"> consideration of salinity, flooding, contamination and acid sulfate soil impacts 	Section 6.6, 6.7, Appendix I
7. Key Issue – Hazards	
<ul style="list-style-type: none"> a preliminary risk screening completed in accordance with State Environmental Planning Policy No. 33 – Hazardous and Offensive Development and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development 	Section 4.2, Section 6.4, and Appendix K (PHA)

Requirement	Location in EIS
<ul style="list-style-type: none"> should preliminary screening indicate that the project is "potentially hazardous" a Preliminary Hazard Analysis (PHA) must be prepared in accordance with Hazardous Industry Planning Advisory Paper No. 6 - Guidelines for Hazard Analysis (DoP, 2011) and Multi-Level Risk Assessment (DoP, 2011). 	N/A
8. Key Issue – Visual	
<ul style="list-style-type: none"> an assessment of the potential visual impacts of the project on the amenity of the surrounding area. 	Section 2.3 and Section 6.1
9. Plans and Documents	
<ul style="list-style-type: none"> 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. 	Appendix F
10. Consultation	
<p>During the preparation of the EIS, you must consult with the relevant local, State or Commonwealth Government authorities, service providers, community groups and affected landowners. In particular you must consult with:</p> <ul style="list-style-type: none"> Campbelltown City Council; Environmental Protection Authority; Department of Primary Industries; Roads and Maritime Service; and Nearby land owners and occupiers that may be affected by the proposal. <p>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.</p>	Section 1.6 and Appendix B – Consultation Summary

1.5. Consultation

APP engaged with the surrounding landowners and sought comment on the proposal from 28 October until 11 November 2016. The consultation process undertaken for the project with government agencies and the concerns raised have been prepared by APP and are included at **Appendix B**. This includes:

- A record of any consultation with agencies and the community;
- An itemised summary of the issues raised and how the proposal has responded to the issue; and
- A record of the documentation provided to the surrounding business and residential areas to inform them of the proposal.

A summary of the consultation undertaken is provided below:

- Meeting with the proponent and Environmental Protection Authority (EPA) on 18 March 2016. The matters raised by the EPA are provided in **Appendix B** and are summarised below:

General	
The EIS and supporting technical reports should clearly outline any departures from guidelines.	Any departures from guidelines, are described in Section 6 of the EIS with further justification provided in the relevant technical report.
The EIS should include a clear description of the types of wastes.	Section 4.1 of the EIS provides a clear description of the types of waste to be received and processed on site.
The EIS should include a clear description on the waste processing methodology	Section 4.1 of the EIS provides a clear description of the processing methodology.
The supporting technical reports should justify how they have identified receptors / receivers	The Noise and Vibration Impact Assessment (Appendix L) and Air Quality Impact Assessment (Appendix M) describe how receptors have been identified with reference made to the relevant guidelines.
Noise and Vibration Impact	
The EIS should include a clear list of all plant operating on site, processing areas, and if in an enclosed environment, describe the building materials (i.e. precast concrete / metal wall sheeting etc.).	Section 4.2.4 of the EIS provides a list of all plant and equipment to be used during operations. Section 4 of the EIS provides an overview of processing activities and includes a description of the building works.
Confirmation that no crushing or grinding works are proposed.	Crushing or grinding works do not form part of the proposal and are not mentioned in Section 4 of the EIS or elsewhere in the proposal.
Dust Impact	
AQIA would need to address stockpile heights, storage locations and composition of stockpiles	The location of all material storage areas is described in Section 4 of the EIS, Appendix F – Architectural Plans, and assessed in Appendix M – Air Quality Impact Assessment
Odour Impact	
Acknowledged that odour sources would be limited to small quantities of green waste. Recommend that a percentage is nominated and odour source modelled in the AQIA.	Section 4.2.1 of the EIS describes waste types including the predicted quantities of green waste. While the AQIA does not model odour, justification for not modelling is provided in the AQIA.
Wastewater Impact and Leachate Management	
Leachate from greenwaste will need to be accounted for, even if being accepted in small quantities amongst other mixed building waste.	Leachate management is considered in Section 6.6 of the EIS and further in Appendix I – Soil and Water Management Strategy.
The EPA is taking a greater focus on water quality and may ultimately nominate a discharge point on the EPL which will need to be monitored.	Section 6.11 of the EIS provides a summary of commitments to manage water quality including a commitment to monitor at the point of discharge, should this be required in the EPL.

- Campbelltown City Council (Council) was approached for a direct meeting, however did not seek to meet to discuss the proposal when initiated (Pre SEARs request). Further telephone discussion (10/08/2016) with

Council's planning manager, Mr Brendan Leo was held during the proponent's consultation process. Mr Leo advised that it was not necessary to meet provided that the matters raised in Council's email (15/01/2016) to the DPE for the preparation of the SEARs were addressed adequately in the EIS. These matters related to traffic, flooding, odour, dust, noise, asbestos, sealing of the site, stormwater management and landscaping. The proponent advised that these matters were being addressed in the EIS, hence no meeting was held.

- TTPP consulted with Roads and Maritime Services (RMS) on 24/06/2016 and was advised that it had no additional assessment requirements for inclusion at this stage other than that mentioned in the SEARs.
- TTPP also consulted with RMS with respect to alternate routes for heavy vehicles 12 April 2017. This advice has been considered in identifying the preferred heavy vehicle routes for the facility.
- APP provided written notification to surrounding landowners providing a two week opportunity to comment on the proposal. A total of 258 letters were mailed to surrounding landowners by an independent mail-out company (Bigmailout). A copy of the notification letter is provided at **Appendix B**.
- Landowners were also encouraged to view the proposal on-line and to lodge a submission through the website created at www.mintorecyclingcentre.com.au for the exhibition process.

One submission was received during the consultation period from Mr Andrea Kalambokas, a local landowner (16 and 18 Pembury Road) who made the following comments:

- Likely impact on the road network and condition of road pavement with particular regard to dirt being tracked onto road;
- Has no concerns with noise or hours of operation; and
- Believes the facility should have its own independent road access.

The proponent contacted Mr Kalambokas via telephone and advised that an above ground wheelwash will be installed at the exit weighbridge which will reduce the likelihood of dirt being tracked from the site onto the road. The proponent has indicated that Mr Kalambokas was satisfied with this solution. Further dust and dirt mitigation measures along with the suitability of the local road network are addressed in the body of this EIS. The feedback from this process has been incorporated into the proposed development and documented in **Appendix B**.

Subsequent to this discussion, the proponent has improved the design of the wheelwash and determined that an in-ground wheelwash would better suit the needs of the facility.

2. Site Analysis

2.1. The Site

The site is known as 13 Pembury Road, Minto and is legally described as Lot 1, DP1013852. The site has an area of 8,957m², and an overall development footprint of 3,041.41m² which services the existing waste management facility. The site is occupied by Minto Recycling Pty Ltd and owned by Pembury Street Pty Ltd.

The site is irregular in shape and serviced by a 58.5 metre road frontage which connects with Pembury Road. The site is surrounded by other light industrial and warehousing developments, from the north, south, and east, while the site's western boundary adjoins Bow Bowing Creek Reserve. The site is visible from Pembury Road and as it is mostly developed, it does not contain any remnant vegetation or attributes that indicate any ecological value.

The existing structures on site include:

- Two (2x) weighbridges;
- Three (3x) colorbond clad metal sheds with push walls and machinery, known as:
 - Shed A – Waste storage (930m²);
 - Shed B – Waste processing (962m²); and
 - Shed C – Waste tipping (1,150m²).
- Site office;
- 30,000L diesel fuel tank;
- 3 vehicle carparking spaces;
- Stormwater management;
- Conveyor System (30tph);
- 100kL underground rainwater tank;
- Fogging system within Shed B; and
- Landscaping at the entrance of the site.

The topography of the site is relatively flat terrain, with a gentle fall towards the north and north-east and ranges from RL45.5m at the southern boundary of the site to RL44m adjacent to the driveway crossing in the north-eastern boundary.

A topographical and detail survey plan detailing existing improvements and site levels is found at **Appendix C**.

Existing stormwater infrastructure services the building and hardstand areas. The stormwater flows into a proprietary stormwater treatment device before discharging off-site into the Campbelltown City Council stormwater system, which drains into Bow Bowing Creek adjacent to the site. All roof water is directed into an underground 100kL rainwater tank for reuse on the site.

The site has two driveway access points off Pembury Road. The eastern and western driveways have widths of 11.5m and 6m, respectively. The eastern driveway is the main access to the site as it provides entry and exit to the site while the western driveway is currently unused. Each weighbridge can accommodate one vehicle at a time and has dimensions 18.1m long by 2.8m wide. The main access driveway is configured as two-way, while the internal road layout is configured as one-way. All vehicle movements to/from and within the site are in a forward direction.

2.2. Description of Existing Operations

The existing facility operates under a development consent (consent) issued by Campbelltown City Council on 14 December 2004 (1/DA2002) for the development of a waste transfer station on the subject property. On 29 May 2008, a S96(2) Modification application under the EPA Act was approved by Council increasing the processing capacity to 30,000t per annum. The approved hours of operation are 6:00am – 7:00pm, Monday to Saturday.

The consent (as modified) permits general solid waste (non-putrescible) to be received and processed on site.

In accordance with the consent and EPL, currently only general solid waste (non-putrescible), as described in EPL 20368, is accepted at the existing facility. A copy of the EPL20638 is provided at **Appendix E**.

The following wastes are not accepted or processed at the site:

- Asbestos;
- Liquid Wastes;
- Putrescible Wastes;
- Flammable Materials;
- Hazardous Wastes; and
- Radioactive Wastes.

A copy of the consent (as modified) can be found at **Appendix D**.

An Environment Protection License (EPL20638) was issued on 25 November 2015 under the *POEO Act, 1997* to regulate current operations. The EPL describes the types of waste which may be received at the facility and what activities can be undertaken in relation to each of the wastes permitted to be held on site. The EPL permits resource recovery, waste processing and waste storage of scrap metals and building and demolition waste comprising the following waste streams:

- Concrete;
- Masonry;
- Ceramics;
- Timber;
- Plastic;
- Glass;
- Paper & cardboards; and
- Ferrous and non-ferrous materials.

This proposal seeks to expand the waste streams received by the EPL. The waste streams proposed to be received include:

- Wood waste;
- Non-chemical manufacturing waste (metal, timber, paper, ceramics, plastics, thermosets and composites);
- Asphalt waste;
- Soils;
- Glass, plastic, rubber, plasterboard, ceramics, bricks, concrete or metal;
- Household waste from municipal clean-up that does not contain food waste;
- Office and packaging waste that is not contaminated or mixed with any other type of waste;
- Building and demolition waste;
- Virgin excavated natural material;
- Other non-putrescible general solid waste types to be accepted on-site include:
 - Waste classified as non-putrescible general solid waste;
 - Waste pre-classified as non-putrescible general solid waste such as:
 - Foundry sand;
 - Household waste from residential clean-up;
 - Council clean-up materials from public, community and open space;
 - Waste that meets all conditions of a resource recovery order;
 - Any mixture of non-putrescible general solid waste types;
 - Bulky goods waste containing building de-fittings, fixtures and furniture;
 - Waste collection by or on behalf of Council's street sweepings;
 - Grit, sediment, litter, gross pollutants collected and removed from stormwater treatment devices and stormwater management systems that have been dewatered so that they do not contain free liquids;
 - Grit and screenings from potable water and water reticulation plants that are:
 - Non-putrescible vegetative wastes; and
 - Cured concrete waste from a batch plant.

The EPL limits the amount of waste permitted on the premises at any one time to 7,500 tonnes and limits the overall quantity to be received and processed to 30,000 tonnes per annum as a result of Development Consent 1/DA2002. The existing facility separates mixed non-putrescible building and demolition waste and scrap metals into different waste types.

The existing development is understood to generate approximately 88 (two way) vehicle movements per day. Trucks currently enter the existing facility from Pembury Road and are directed to a receiving or tipping area via the weighbridge where the waste is checked for any 'non-conforming' waste. Any trucks containing 'non-conforming' waste are directed off-site. Trucks then proceed to deposit waste within the existing processing facility. A second inspection is then undertaken.

Any 'non-conforming' waste is subsequently removed from the facility. Any sizeable and intact recyclables are also removed from the waste stream and sorted into bays by manual and / or mechanical means. Mobile plant in the form of a front-end loader and excavator load the material into the processing area situated within the existing shed and awning. The trucks then leave the facility onto Pembury Road.

Waste is sorted using equipment such as mobile loaders, excavators, processing plant as well as by hand. Materials extracted during the processing stage are sorted and placed into separate storage bays (i.e. wood, plastics, metal and concrete). Once a suitable volume of a particular product is reached, it is loaded and transported from the site for reuse or to another licensed facility for further resource recovery. Any residual waste, or recyclable material without a viable market, is transferred to either another licenced facility for the purpose of resource recovery or a licensed landfill.

2.3. Surrounds

The site is located within an established industrial precinct bound by Essex Street to the north, Rose Payten Drive to the south, Pembroke Road to the east and Campbelltown Road to the west. Surrounding development is typified by a mix of light industrial/commercial developments including light industrial warehouses undertaking low risk activities, including an office equipment supplier, auto repair shops, consulting engineers and freighters in close proximity to the site. **Figure 2** shows the land use mix, road layout and built form representative of the broader locality.

The nearest residential receivers are found approximately 350 metres to the west of the site, along Campbelltown Road which is a two-way arterial road.



Figure 2 Location Plan

Source: Transport Impact Assessment, TTPP

The location of the nearest receivers is provided in **Figure 3**, whilst a list of receptor type and location is provided in **Table 2**



Figure 3 Sensitive Receptor Location

Source: SLR 2017

Table 2 Sensitive Receptor Locations Used in this Assessment

Receptor ID	Easting (m)	Northing (m)	Receptor Type
Residential Receptors			
R1	301,332	6,232,327	Residential
R2	300,956	6,232,650	Residential
R3	301,012	6,233,168	Residential
R4	300,365	6,233,376	Residential
R5	299,933	6,232,914	Residential
R6	299,679	6,232,370	Residential
R7	299,567	6,232,073	Residential
R8	299,491	6,231,799	Residential
R9	299,491	6,231,277	Residential
R10	299,600	6,230,993	Residential
R11	299,540	6,230,488	Residential
R12	299,649	6,229,921	Residential
R13	300,474	6,230,271	Residential
R14	300,685	6,230,670	Residential
R15	300,854	6,231,036	Residential
R16	301,035	6,231,508	Residential
R17	301,190	6,231,927	Residential
Industrial Receptors			
I1	299,751	6,231,935	Industrial
I2	299,903	6,231,943	Industrial
I3	300,045	6,231,899	Industrial
I4	300,070	6,231,698	Industrial
I5	299,903	6,231,491	Industrial
Community Receptors			
C1	299,460	6,232,477	Community
C2	300,558	6,232,509	Community
C3	301,261	6,232,456	Community
C4	301,280	6,231,579	Community
C5	300,675	6,230,249	Community
C6	300,052	6,230,176	Community

Source – SLR 2017

2.4. Surrounding Road Network

The road network which serves the majority of vehicle movements associated with the facility also serves other industrial development in the area and is illustrated in **Figure 4**. Intersection vehicle counts were conducted on Thursday 26 March 2016 at two nearby key intersections, namely, Campbelltown Road/ Ben Lomond Road and Campbelltown Road/ Rose Payten Drive during the following road network peak periods:

- AM peak period: 7:00am – 11:00am; and
- PM peak period: 3:00pm – 6:00pm.

The location of the key intersections assessed are shown in **Figure 5** and **Figure 6**.

RMS average annual daily traffic (AADT) on Campbelltown Road confirms the road network peaks within the site vicinity. AADT data for Thursday 26 May 2016 identifies the AM and PM road peaks as 8:00am – 9:00am and 4:00pm – 5:00pm, respectively.

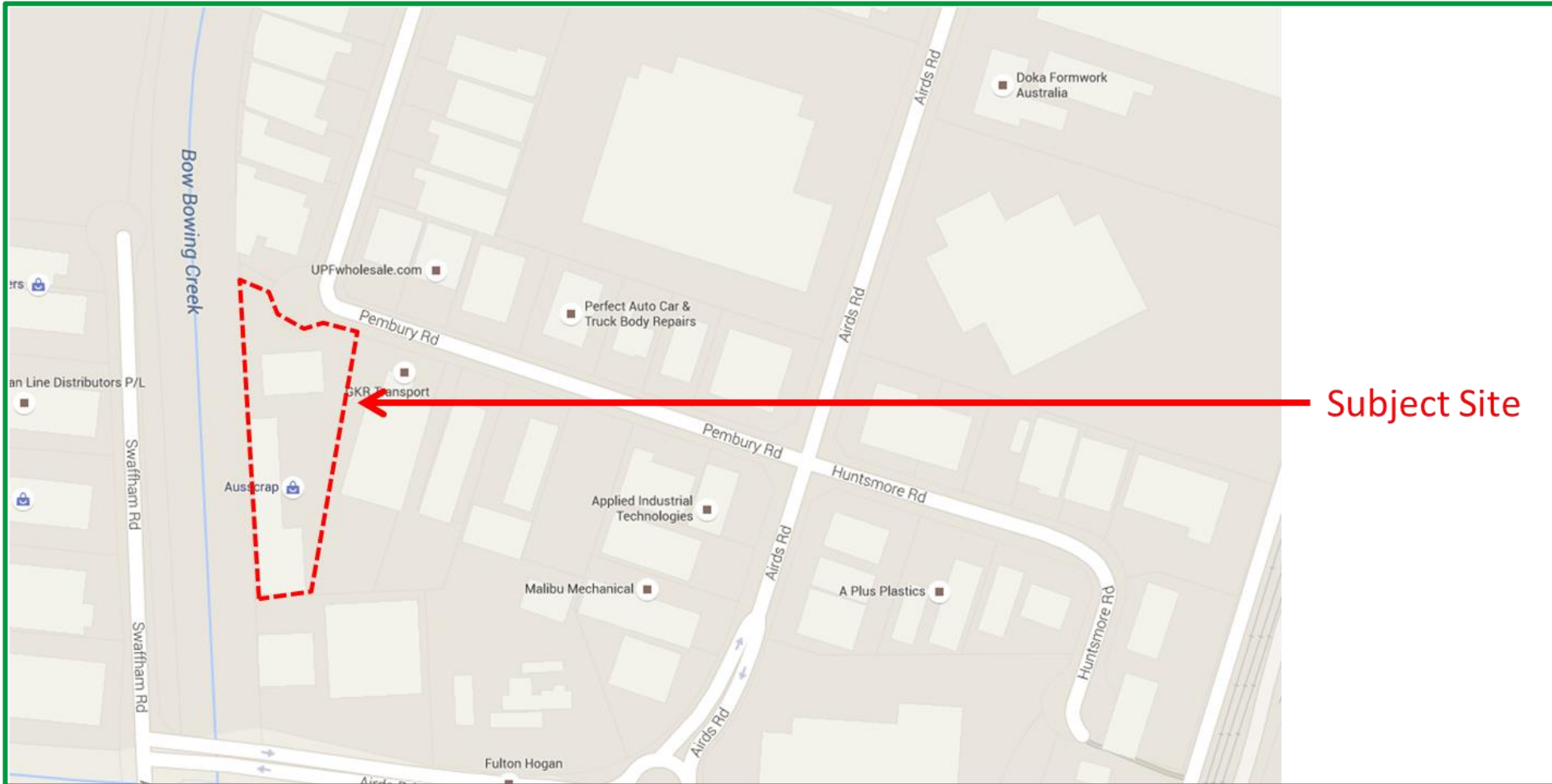


Figure 4 Local Road Network

Source: TTPP Transport Impact Assessment 2017

2.4.1. Heavy Vehicle Routes

Heavy vehicles travelling to and from the site currently access Pembury Road via Ben Lomond Road and Airds Road. The key intersections within the vicinity of the site are Campbelltown Road/ Ben Lomond Road and Campbelltown Road/Rose Payten Drive. The vast majority of vehicles accessing the site travel via the Hume Highway, approximately 800 meters west of Pembury Road.

Figure 5 and **Figure 6** provide an overview of the inbound and outbound vehicle routes and distribution and the location of key intersections assessed.

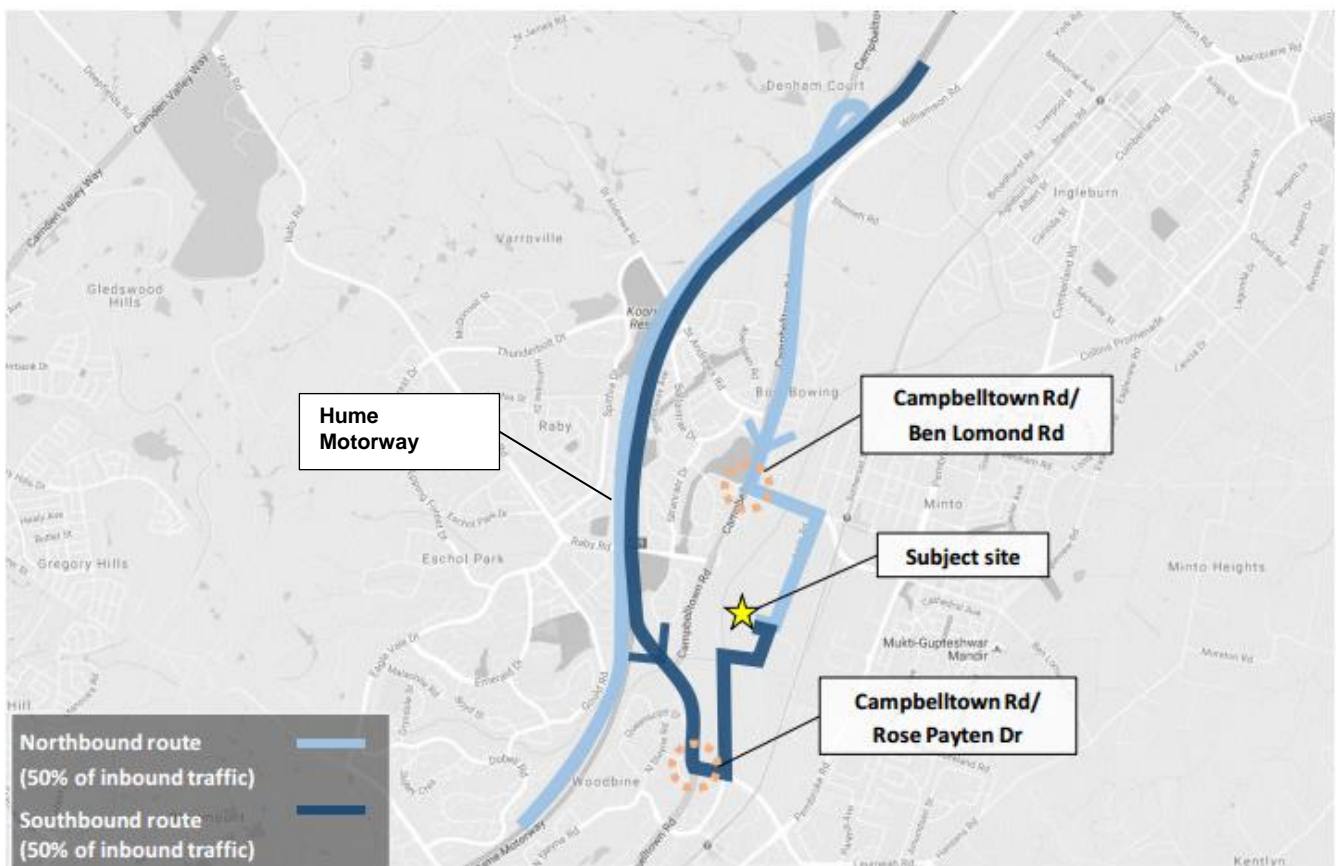


Figure 5 Inbound Vehicle Routes

Source TPPP Transport Impact Assessment 2017

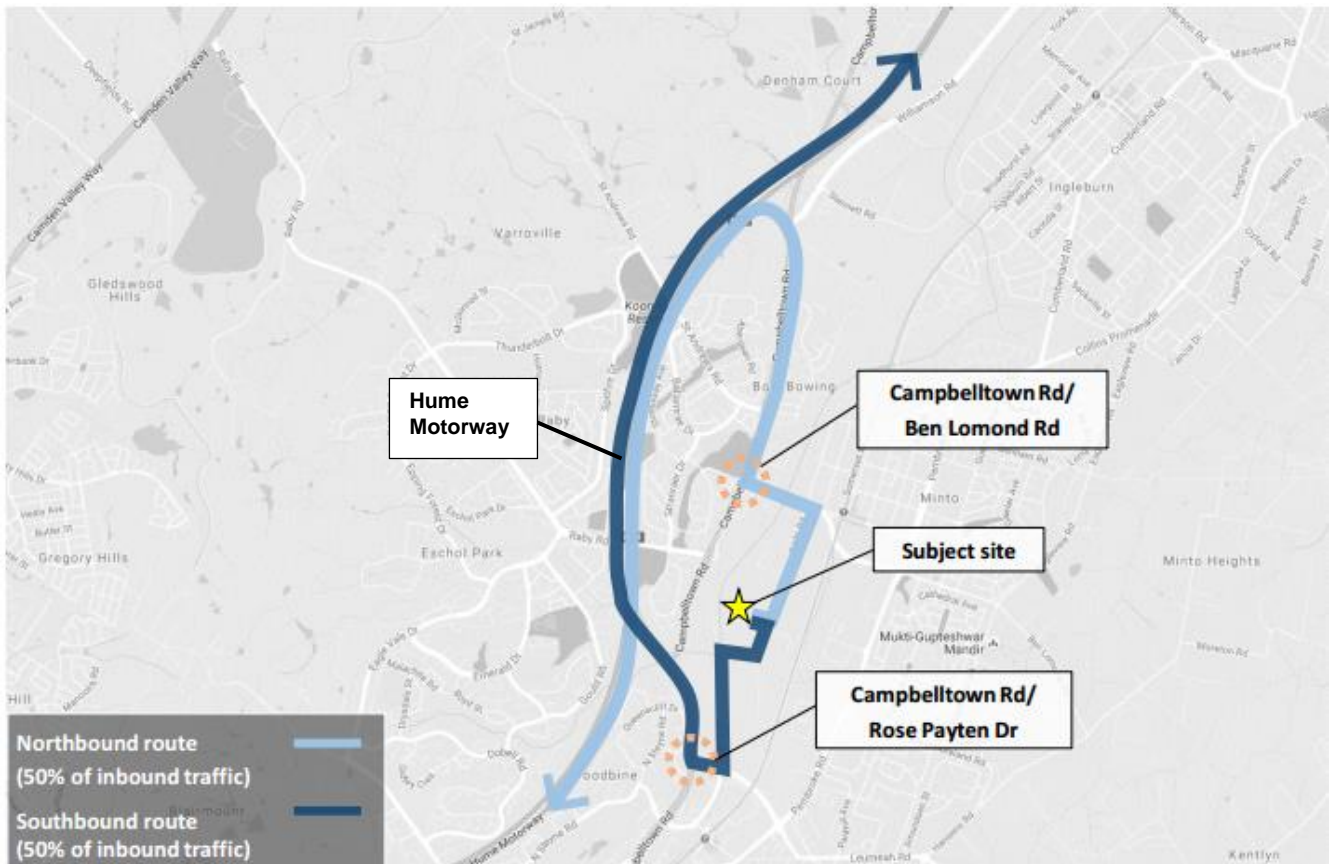


Figure 6 Outbound Vehicle Routes

Source: TTPP Transport Impact Assessment 2017

The role and function of the road infrastructure most frequently used by vehicles associated with the proposed development is summarised in Section 2.4.2, below.

2.4.2. Adjoining Road Network

Pembury Road

Pembury Road is a local road which runs east-west along the northern boundary of the site. Opposite the site, the alignment of the road changes to a north-south direction. Pembury Road is a no-through road with an unmarked two-lane two-way carriageway. The width of the carriageway is 12m and there is unrestricted on-street parking permitted on both sides of the road. The sign posted speed limit along Pembury Road is 50km/h.

Airds Road

Airds Road is a collector road located towards the east of the site. Airds Road has a north-south alignment and a 16m wide carriageway. The roadway is two-lane two-way with opposing traffic movements divided by a broken separation line. Unrestricted on-street parking is permitted on both sides of the road. The posted speed limit is 50km/h along Airds Road. Within the vicinity of the site, a pedestrian footpath is located along the south-eastern side of Airds Road.

Ben Lomond Road

Ben Lomond Road functions as a sub-arterial road and is located to the north of the site. It is 17m in width and is configured as a two-way four lane road. At its western end, Ben Lomond Road increases to five lanes. Opposing movements are separated by a median which varies in width between 0.4 and 6m, with a section of road separated by double barrier line marking. Stopping and parking is not permitted on both kerbsides of Ben Lomond Road and the posted speed limit along the road is 60km/h.

Rose Payten Drive

Rose Payten Drive functions as a sub-arterial road and is located south of the site. Rose Payten Drive is generally east-west aligned and changes to Leumeah Road towards its south-eastern end. It is a two-way road configured with four lanes. The carriageway is 17m in width and has a raised median of 0.5m wide separating opposing traffic movements. Stopping and parking is not permitted on both kerbsides of Rose Payten Drive and the posted speed along the road is 60km/h.

Campbelltown Road

Campbelltown Road is a two-lane two-way road which runs in a north-south direction. The carriageway is 11m in width with double barrier line marking separating opposing traffic movements. The verge width on the east and west sides of the road are a minimum of 10m and 12m, respectively, in which vehicle stopping and parking is unrestricted. The sign posted speed limit in the area is 70km/h.

2.5. Water Catchment

The Bow Bowing Creek is located to the west of the site. The SSD application does not have any direct impact on the Creek since there are no changes to the levels on the site. Further, the existing buildings and site are bunded which will ensure that any run-off does not impact the creek.

Campbelltown City Council has advised that all properties within the Campbelltown City local government area may be affected by flooding caused by overland flow or local topography. Council is currently undertaking a flood study of the Bow Bowing/Bunbury Curran Creek Catchments to which the site is a part of.

It is noted in a development consent for the subject site (DA E1/2002) that Council prescribed a minimum flood control level of RL 45.45 AHD on the southern boundary, RL45.10, AHD 100m north of the northern boundary, and RL44.65m AHD on the northern boundary. The proposed development does not seek to alter finished site levels which are consistent with this approval.

3. Project Need and Alternatives

3.1. Project Need and Justification

This EIS demonstrates that the Minto facility will have sufficient capacity to process 220,000 tonnes of waste per annum with minimal environmental impact. The current approval allows the site to process 30,000 tonnes of waste per year, with the site not being used to its fullest potential. The proposed 220,000 tonnes sought under the SSD reflects a market demand for waste and recycling facilities from the housing and infrastructure boom currently experienced in NSW.

Technical studies provided as part of this EIS indicate that the site can support the proposed 220,000 tonne limit with minimal impact to the environment, the surrounding businesses and community. It is noteworthy that technical studies undertaken were supportive of a throughput of 300,000 tonnes. Site operations will be supported by appropriate mitigation measures to prevent any risks to the environment.

The Minto facility forms part of a network of seven other similar facilities located throughout NSW and operated by related entities of the site operator. The entire business network collects, separates, recycles and processes approximately 27% of NSW's construction and demolition waste. In-line with the predicted increases in waste generation across the State (NSW Waste Avoidance and Resource Recovery Strategy 2014 – 21) and ongoing trends and expectations to recycle a higher percentage of waste, demand for the operator's services is increasing across Greater Metropolitan Sydney and the State. This includes significant government led infrastructure projects which require the operator to manage waste on behalf of the government or appointed head contractor.

Amongst this, it must also be recognised that the industry is heavily regulated, with obligations to track waste throughout the cycle becoming an integral and accepted part of day to day business. To this extent, the management of waste is not confined to individual sites, but in the case of the operator, run as a network, with scheduling, fleet management and waste / vehicle tracking coordinated from a dedicated resource and scheduling centre.

For the majority of vehicle movements associated with site operations, the timing of a delivery of waste, the volume and nature of the waste being transported is known and planned for, well in advance of arriving at the Minto site. Similarly, the end destination of the waste after separation is known well before it arrives to site. Commercial arrangements are in place with numerous facilities that can accept each waste type likely to be generated by site processes.

The site operator has a tested and proven waste management and handling system combined with certified operational, maintenance and risk management procedures. It should also be noted that the operator has made a significant investment in site upgrades to new generation processing equipment to ensure efficient operations and reduced noise levels when compared to conventional resource recovery facilities.

The proponent remains committed to work with the NSW Government to not only achieve the Government's vision for Sydney by implementing the Plan for Growing Sydney (the Plan) but also by handling and managing waste efficiently and contributing towards employment and housing delivery. It would also assist the government and the Environmental Protection Authority in achieving recycling targets and the overarching objectives of the NSW Waste Avoidance and Resource Recovery Strategy 2014 – 21.

Approval of this project would assist the NSW Government in achieving these objectives by providing a suitably located resource recovery facility which would utilise the most advanced processing technology to process up to 220,000 tonnes of waste per annum.

To achieve the objectives of the Plan, it is imperative that facilities such as the Minto facility are given the necessary support to reduce demand on landfill and enable Sydney to better manage the impact of development on the environment.

3.2. Consistency with Strategic Planning and Waste Policy Framework

In this regard, the development of the Minto facility would assist in achieving a key objective of the Plan and needs of the wider community with respect to waste management and resource recovery. The proposed development would contribute to the NSW Government's waste management targets in relation to the diversion of waste from landfill and avoiding unnecessary transportation of waste. Specifically, the proposed development is consistent with the following regulatory and policy strategies:

- *Plan for Growing Sydney (Department of Planning, 2014);*
- *Protection of the Environment Operations (Waste) Regulation, 2014; and*
- *NSW Waste Avoidance and Resource Recovery Strategy 2014 – 21.*

Analysis undertaken by the NSW Environment Protection Authority indicates that 17.1 million tonnes of material entered the NSW waste management system in the 2010 – 11 financial year, up from 16.3 million tonnes two years earlier representing an increase of 5.2%. Waste generation rates continued to outstrip population growth of 3.4% during the same period. At the same time, the amount of waste sent to landfill decreased from 6.7 million tonnes in 2008 - 09 to 6.4 million tonnes in 2010 – 11, indicating a substantial increase in the overall volumes of waste diverted from landfill. In 2010 – 11, it is understood NSW recycled 10.8 million tonnes compared with 5.3 million tonnes in 2002 – 03. Given the divergence of waste production from population growth and the ongoing trend and expectation to recycle a higher percentage of waste, it is predicted there will be further demand on existing waste facilities to increase capacity and the need for new facilities to accommodate the predicted increase in waste volumes.

This is reflected in the *NSW Waste Avoidance and Resource Recovery Strategy, 2014-21*, (WARRS) adopted December, 2014 which sets new targets for increasing recycling across the State. Specifically, the WARRS sets the following targets for recycling by 2021 – 2022:

- *Municipal solid waste from 52% (in 2010- 11) to 70%;*
- *Commercial and industrial waste from 57% (in 2010 – 11) to 70%; and*
- *Construction and demolition waste from 75% (in 2010-11) to 80%.*

While strategies relating to education, economic incentives, industrial ecology, inter-agency consultation and product stewardship underpin the delivery of the WARRS objectives, it is imperative that waste handling and processing is undertaken in a cost effective and market driven manner. This necessitates the need to provide waste or resource management facilities capable of accepting and processing the predicted increased volume of waste, with a particular emphasis to those capable of recycling and resource recovery.

The existing facility contributes to achieving the broader objectives of the strategy, however the limitations on operations curtail the opportunity to accept, recycle and recover a greater volume of waste in a more efficient and cost effective manner.

Further to the WARRS objectives, the *Plan for Growing Sydney* (The Plan) identifies the need for additional waste management and recycling infrastructure, including landfill and liquid waste processing capacity. The Plan specifically notes the need for:

- additional recycling infrastructure capacity of 165,000 tonnes per year for municipal (local council) waste;
- additional recycling infrastructure capacity of 380,000 tonnes per year for commercial and industrial waste; and
- an additional 25 community recycling centres for recycling of household hazardous waste.

Approval of the proposed SSD would assist in meeting the objectives of the WARRS.

Furthermore the proposal will align with the proposed 75% resource recovery targets for facilities which receive more than 30,000 tonnes of construction and demolition waste imposed from March 17 2017 (EPA 2016).

The proposal seeks to receive waste over an extended period to service waste management requirements associated with major infrastructure projects. Notable projects that have been secured in the site operator's 10-year project pipeline include, but are not limited to those identified in Table 3 below.

Table 3: Sydney Infrastructure Projects

Project	Estimated Completion Date
North Connex	2019
Sydney CBD and SE Light Rail	2019
Revitalise Newcastle	2019
West Connex	2023
Parramatta Light Rail	2023
Sydney Metro	2024
Western Sydney Infrastructure Plan	2025
Future Focused Schools	2025
Gateway to the South	2025

Source: Minto Recycling Pty Ltd

Major infrastructure projects, including the above, would account for the majority of evening and night-time deliveries. Many of these project construction sites are currently operating over a 24-hour six-day period and the site operator has secured a significant volume of material from these and similar projects. As such, to be able to provide its clients with the waste services they require, the SSD application seeks to match the night-time hours of operation until 10:00pm.

The extended night-time operation would allow the majority of waste to be delivered at a pre-arranged and convenient time to the facility. This operation is expected to be strictly controlled by the Operator to ensure minimal impact on the local amenity.

3.3. 'Do nothing' Option (Alternatives)

In addition to the project described in this report, the 'do nothing' option was considered. This would involve the site continuing to operate with no plans to increase capacity.

If the 'do nothing' option was adopted (i.e. the existing waste management and resource recovery facility continues to operate), the site would continue to accept and process waste at a level which is not predicted to satisfy market demand as a result of an increase in waste streams generated from significant construction and infrastructure projects earmarked in the short to medium term.

The 'do nothing' option would only increase the likelihood of waste being transported further afield, increasing the overall cost of waste management for construction and infrastructure projects proposed in the catchment of the subject site through increased transportation and disposal costs, and increasing the overall transport risk associated with those projects. Furthermore, the 'do nothing' option is more likely to result in certain wastes being disposed of at landfill, thus undermining the objectives and targets of the WARRS. Without the convenience of local facilities with the necessary capacity, there is also the increased risk of illegal dumping.

Given the overall balance of environmental, social and economic impacts of the proposal, as described in this EIS, the benefits of pursuing the proposal outweigh the 'do nothing' scenario. On this basis, the 'do nothing' option was not considered further.

4. Proposed Development

4.1. Overview

Approval is sought to increase the processing capacity of the existing waste or resource recovery facility from 30,000 tonnes per annum to 220,000 tonnes per annum. An approval will supersede previous approvals issued over the site and provide a new suite of operating requirements and mitigation measures commensurate to the increased processing capacity. The facility would continue to process general solid waste (non-putrescible), as described in the *Waste Classification Guidelines, 2014*, prepared by the NSW Environment Protection Authority (EPA). The facility is defined as a resource recovery facility under Part 3, Division 23 of State Environmental Planning Policy (Infrastructure), 2007 (ISEPP).

SSD approval is sought for:

- processing 220,000 tonnes of waste per annum;
- a new in-ground weighbridge and wheelwash situated between Site Shed A and the western property boundary;
- a new 600kw electrical substation, a site office, amenities block;
- relocation of a 30,000 litre diesel fuel tank;
- 10 car parking spaces with 7 provided within a new 118m² concrete hardstand area and a further 3 spaces at the site entry; and
- hours of operation from 6am -10pm Monday to Saturday.

The majority of waste types appearing in in-bound waste are listed below with a predicted breakdown of the 220,000 tonnes of waste as a percentage being:

- 2% wood waste;
- 2% non-chemical waste from manufacturing;
- 1% asphalt;
- 10% soils;
- 0.5% paper and cardboard;
- 0.5% glass, plastic, rubber, plasterboard etc.;
- 2% household waste from clean up;
- 2% office and packaging waste;
- 5% VENM (Virgin Excavated Natural Material);
- 75% building and demolition waste; and
- Other non-putrescible general solid waste, the percentage of which is dependent on customers and waste generating activities in the region.

Other non-putrescible general solid waste types to be accepted on-site include:

- Waste classified as non-putrescible general solid waste;
- Waste pre-classified as non-putrescible general solid waste such as:
 - Foundry sand;
 - Household waste from residential clean-up;
 - Council clean-up materials from public, community and open space;
 - Waste that meets all conditions of a resource recovery order;
 - Any mixture of non-putrescible general solid waste types;
 - Bulky goods waste containing building de-fittings, fixtures and furniture;
 - Waste collection by or on behalf of Council's street sweepings;
 - Grit, sediment, litter, gross pollutants collected and removed from stormwater treatment devices and stormwater management systems that have been dewatered so that they do not contain free liquids;
 - Grit and screenings from potable water and water reticulation plants that are:
 - Non-putrescible vegetative wastes; and
 - Cured concrete waste from a batch plant.

Unexpected finds of materials such as asbestos, tyres, batteries, gas bottles, fire extinguishers and food may be encountered from time to time. These materials would be handled in accordance with a project specific OEMP procedures and stored for disposal.

The proposed 220,000 tonnes sought under the SSD application reflects a market demand for waste and recycling facilities from the housing and infrastructure boom currently being experienced in NSW and as reflected by the predicted processing of 75% building and demolition waste at the Minto facility. The specialist studies in the EIS have supported the 220,000-tonne limit sought and this study has proven that the site would operate within industry standards with minimal impact to the environment, the surrounding business and community.

A plan of the proposed site layout detailing the abovementioned improvements is included in **Figure 7** with full architectural plans provided in **Appendix F**.

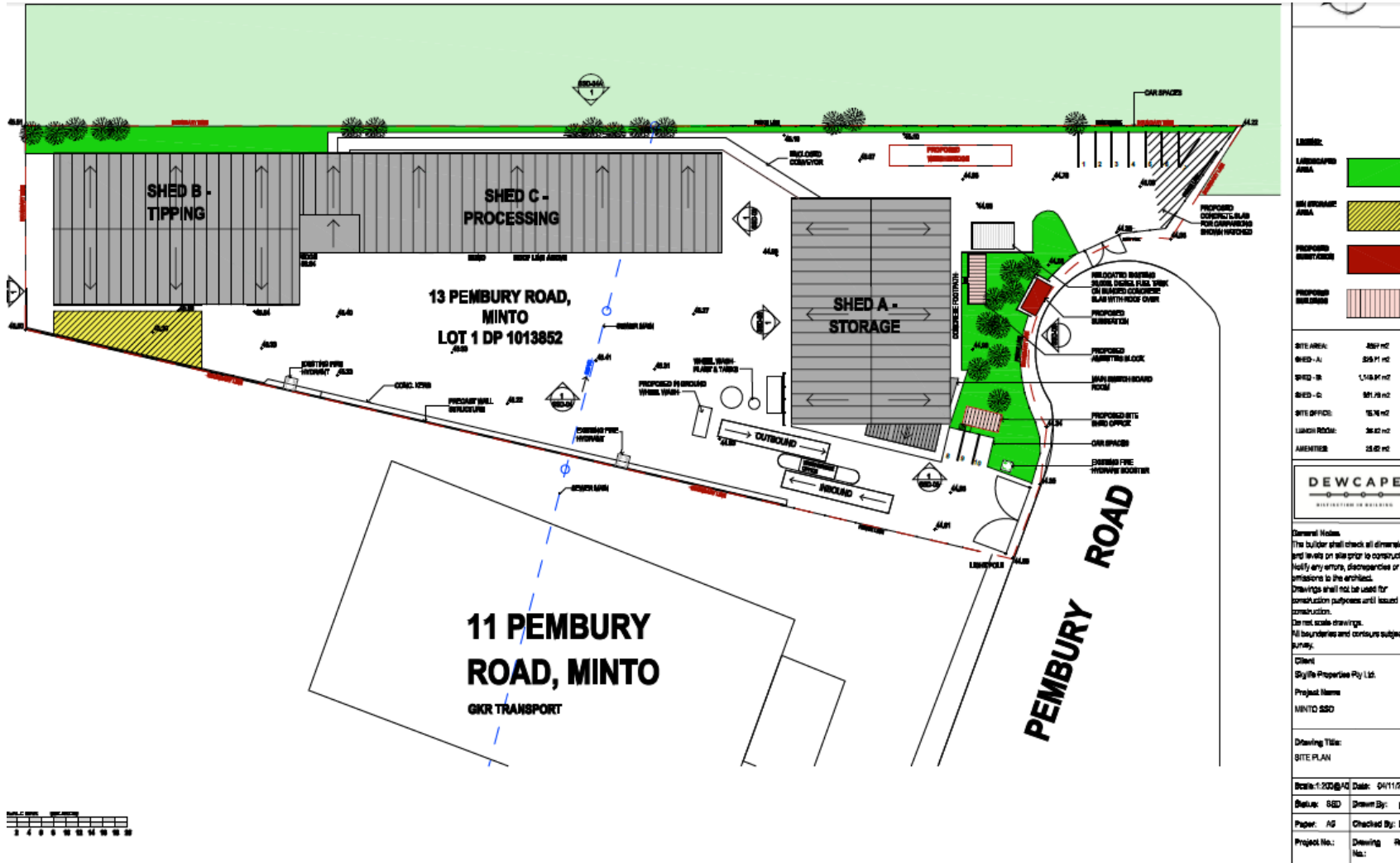


Figure 7 Proposed Site Layout

The proposal would continue to use existing road infrastructure, existing utilities and would maintain the current site access arrangements and stormwater discharge point. Processing and handling of waste would generally be undertaken in a manner consistent with the current arrangements as described in **Section 4.2** of this report.

Architectural plans reflecting the aforementioned description have been prepared by Dewcape Pty Ltd and are included at **Appendix F**.

4.2. Operational Details

4.2.1. Waste Sources

The general category of material received at the Minto facility would not change, however, the composition of materials may vary from time to time since the site operator has secured tenders for several long-term infrastructure projects. There would be a greater proportion of heavy mixed waste material including materials such as soil, brick and concrete, rock and sandstone being received as a result of significant infrastructure and housing development activity in Greater Sydney.

The processed waste and residual materials would be delivered to a wide range of facilities located both within and outside Sydney for further processing or reuse. The facilities to which waste is delivered vary frequently due to market conditions, gate fees, capacity to accept material and waste acceptance criteria. This situation is expected to continue to be the case for the life of the facility.

Due to the extent of development and associated waste generation rates, both current and proposed, as well as the requirement for facilities to adhere to authorised amounts, it is necessary to maintain a number of options for tipping of each material type regardless of whether or not for the purposes of further processing or disposal. The site operator currently has access to many sites (including both disposal and resource recovery facilities) for disposal and recycling of recovered materials.

New sites are considered on an ongoing basis in relation to the facilities ability to lawfully accept the waste, and as there are changes in market demand and market drivers, including changes to gate fees and or a facility advising that they have reached their limits. The facility is proposed to operate as a waste and resource management facility for processing non-putrescible general solid waste (GSW). Waste streams received and processed on site would be consistent with GSW (non-putrescible) waste types.

Limited quantities of green waste would also be accepted at the site within other 'mixed waste' streams, however it is expected that this would represent less than 1% of the waste held on site at any one time and less than 3,000 tonnes handled per annum. The anticipated breakdown of waste streams received is provided in **Table 4**. Other materials are not expected to exceed 5% of the total waste on site at any time.

Table 4: Predicted Waste Streams

Material	Volume (TPA)	Percentage
Wood Waste	4,400	2%
Non Chemical Manufacturing Waste	4,400	2%
Asphalt Waste	2,200	1%
Soils	22,000	10%
Paper and Cardboard	1,100	0.5%
Glass, Plastic, Rubber, Plaster Board	1,100	0.5%
Household Waste (Municipal Clean Up)	4,400	2%
Office and Packaging Waste	4,400	2%
Building and Demolition Waste	165,000	75%
VENM	11,000	5%
TOTAL	220,000	100%

The above estimates have been derived from current throughput at the existing Minto Facility, other similar resource recovery facilities operated by the proponent and predicted waste streams from infrastructure projects which will be serviced by the Minto Facility.

The following waste streams would not be accepted on site:

- Asbestos;
- Liquid Wastes;
- Putrescible Wastes;
- Flammable Materials;
- Hazardous Wastes; and
- Radioactive Wastes.

4.2.2. Proposed Waste Scheduling

Waste deliveries to the site undertaken by the site operator's fleet would be scheduled with the operator prior to the waste leaving its point of origin. Currently, the site operator utilises a live logging system which allows customers to log a request via telephone or via a mobile application (app) that is exclusive to the site operator. Although public deliveries (i.e. non-site operator trucks) are not required to book-in ahead of time, they would be encouraged to do so.

All requests are centrally managed by the Customer Service and Allocations Team at the Head Office in Auburn. The role of the Allocations Team would be to determine a suitable vehicle to collect the waste and site operator facility that is best suited to accept the delivery. The Allocations Team determines these details based on the information provided by the customer at the time of request.

The Allocations Team is also responsible for coordinating the timing of waste collection and delivery. The site operator's fleet are tracked via GPS through the operator's mobile app. Hence, trucks can be diverted to other nearby facilities by the site operator, if required.

All waste would enter the site via the 11.5 metre wide driveway crossing with Pembury Road, where it would be weighed on arrival via the 'eastern' weighbridge. A traffic controller would be located at the site access driveway to manage in and out movements of all vehicles at the eastern access point. The contents of trucks are visually inspected at this point by the weighbridge operator. Loaded vehicles would enter Shed B by undertaking a U-turn and reversing into the tip floor. Following unloading, vehicles would proceed to one of two exit points; light vehicles via the eastern exist driveway while both heavy and light vehicles would use the western driveway exit. The load is to be inspected again on the tipping floor during and after unloading to determine waste acceptability. Bins containing waste to be transported off-site or for tipping at a different time would be held in the bin storage area and covered for transport or pending tipping. **Figure 8** demonstrates the proposed flow of waste and vehicle movements through the facility.

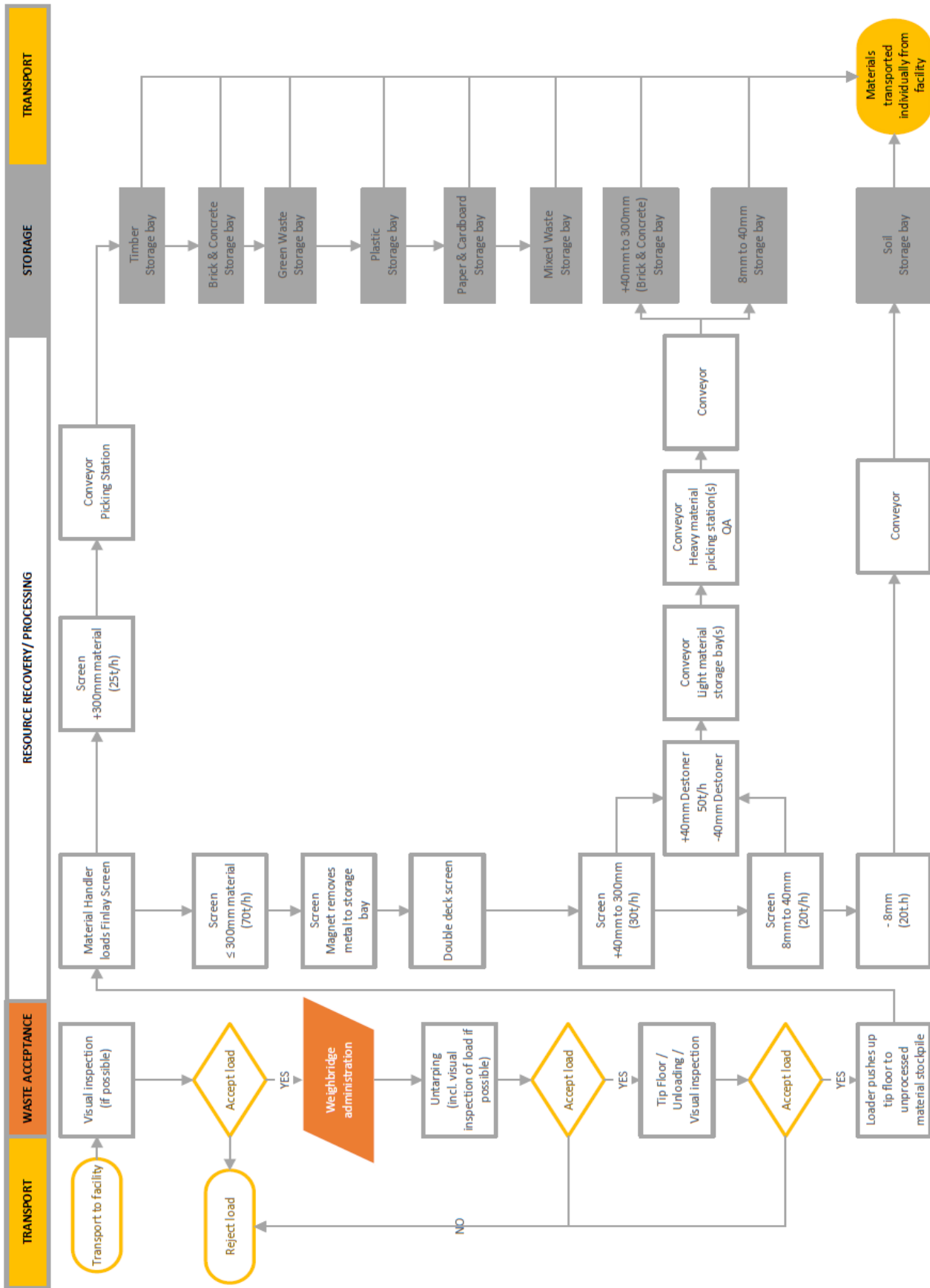


Figure 8 Minto Processing and Handling Flow Chart (Source: Pembury Road Pty Ltd)

4.2.3. Waste Handling

Once light waste is separated in Shed C, a Liebherr Hydraulic Excavator transfers this waste from the waste storage bays onto waste collection trucks which transport waste off-site. A front-end loader will be used on-site to transfer all other processed waste from Shed C to Shed A as needed. The same loader will be used to load material out of Shed A onto trucks for removal.

With regard to operations, material will not be transferred between Shed C and Shed A while waste collection trucks are being loaded. Storage bays are to be emptied when the site is not busy, hence, eliminating interference with vehicle movements on-site. Soil is transferred by an enclosed conveyor from Shed C to Shed A which does not disrupt vehicle movements in any manner.

There would be no conflict between the loader and vehicles whilst on-site as a result of the above operations. Also, there would be no impediment to the loader operations since vehicles will not queue outside of stacking spaces and traffic controllers will be appropriately positioned throughout the site to supervise these movements.

4.2.4. Processing of waste

The waste storage capacity takes into account the capacity of the designated stockpile area for unprocessed material and storage areas for processed materials, deliveries and outbound materials. **Figure 8** sets out the process to manage the proposed annual throughput of 220,000 tonnes per annum waste from delivery to removal off-site. Processing capacity at key stages of material processing are noted in this **Figure 8**.

The advanced automated plant does not only improve handling and processing efficiency, but also reduces vehicle movements to the site and reduces stacking of vehicles within the site during peak periods. With regard to traffic and safety, an additional traffic controller will be positioned at the entrance of the facility to improve vehicle flow in Pembury Road and facilitate vehicles entering and exiting the facility in an efficient and safe manner to both avoid congestion and improve road and pedestrian safety.

4.2.5. Stockpiles

The current Environment Protection Licence (EPL 20638) issued on 25 November 2015 under the Protection of Environment Operations Act 1997 (POEO Act), allows for 7,500 tonnes of waste to be held at the Minto resource recovery facility at any one time.

Under the Minto EIS, the proponent is seeking to increase the maximum allowable waste to be held at the site at any one time to 10,000 tonnes. The proponent believes that a maximum limit of 10,000 tonnes at any one time is appropriate for the site. Following project approval, an application will be made to the Environment Protection Authority (EPA) to vary the EPL to ensure it remains consistent with the approval.

Whilst the proposed plant and machinery has capacity to process in excess of 100 tonnes per hour, it is unlikely that this will occur as the site will never operate at capacity for 100% of the time. It should be noted that main feed for the plant will be adjusted to process a maximum of 100 tonnes per hour under normal operating conditions.

The site operator believes that 10,000 tonnes is a reasonable determination on the basis of the technical assessments supporting the proposal in this EIS. This limit is justified having regard to the volume conversions provided in **Table 5** and **Table 6** below.

Technical assessments prepared to assess the throughput for the Minto facility supports the intended annual throughput of 220,000 tonnes. It can be demonstrated that the stockpile capacity of the site is suitable from the volumetric breakdown of the stockpile area having regard for the different types of waste accepted at the site.

As waste densities are a significant influence on stockpile capacity, two scenarios have been provided to indicate low and high density waste stockpile capacity (in tonnes) using the conversion factors adopted by NSW EPA Waste Levy Guidelines for each material type.

The high-density waste scenario represents a situation where 100% of inbound material is heavy waste. The stockpile area for unprocessed waste has an approximate capacity of 7,380 tonnes. When taking into account the additional storage capacity provided by processed material bays in Shed A, the site has a total storage capacity of approximately 9,843 tonnes.

Table 5: High density waste stockpile capacity scenario

Source: Bingo Industries Pty Ltd

Storage Area	Area (m2)	Volume (m3)	Conversion factor (t/m3)	Tonnes
1. Shed B: Tip Floor / Unprocessed Material	630	4,920	1.5	7,380
2. Shed C: bay - soil	16	61	1.5	91
3. Shed C: bay - waste	16	61	0.7	43
4. Shed C: bay - timber	33	94	1.1	103
5. Shed C: bay - brick concrete rock	33	94	1.2	113
6. Shed C: bay - timber	16	61	1.1	67
7. Shed C: bay - concrete	16	61	1.2	73
8. Shed C: bay - green waste	16	616	1.1	67
9. Shed C: bay - plastic	16	61	1.1	67
10. Shed C: bay - paper and cardboard	16	61	1.1	67
11. Shed C: bay - scrap metal	16	61	1.1	67
12. Shed C: bay - mixed	53	196	0.7	137
13. Shed A: soil	43	147	1.5	220
14. Shed A: concrete	44	151	1.2	181
15. Shed A: timber	73	243	1.1	267
16. Shed A: mixed	42	140	0.7	98
17. Shed A: brick and concrete	74	248	1.2	298
18. Shed A: brick and concrete	46	155	1.2	186
19. Shed A: mixed	59	210	0.7	147
20. Trucks (assumes max stacking of 17 trucks on site at any one time and average 1:1 density all inbound / outbound waste)		170	1	170
TOTAL (tonnes at any one time)	1,262	7,085		9,843

The low-density waste scenario represents a scenario where 100% of inbound material is light waste. The stockpile area for unprocessed waste has an approximate capacity of 3,444 tonnes.

The site has a total storage capacity of approximately 5,907 tonnes when taking into account the additional storage capacity provided by processed material bays in Shed A.

Table 6: Low density waste stockpile capacity scenario

Source: Bingo Industries Pty Ltd

Storage Area	Area (m ²)	Volume (m ³)	Conversion factor (t/m ³)	Tonnes
1. Shed B: Tip Floor / Unprocessed Material	630	4,920	0.7	3,444
2. Shed C: bay - soil	16	61	1.5	91
3. Shed C: bay - waste	16	61	0.7	43
4. Shed C: bay - timber	33	94	1.1	103
5. Shed C: bay - brick concrete rock	33	94	1.2	113
6. Shed C: bay - timber	16	61	1.1	67
7. Shed C: bay - concrete	16	61	1.2	73
8. Shed C: bay - green waste	16	616	1.1	67
9. Shed C: bay - plastic	16	61	1.1	67
10. Shed C: bay - paper and cardboard	16	61	1.1	67
11. Shed C: bay - scrap metal	16	61	1.1	67
12. Shed C: bay - mixed	53	196	0.7	137
13. Shed A: soil	43	147	1.5	220
14. Shed A: concrete	44	151	1.2	181
15. Shed A: timber	73	243	1.1	267
16. Shed A: mixed	42	140	0.7	98
17. Shed A: brick and concrete	74	248	1.2	298
18. Shed A: brick and concrete	46	155	1.2	186
19. Shed A: mixed	59	210	0.7	147
20. Trucks (assumes max stacking of 17 trucks on site at any one time and average 1:1 density all inbound / outbound waste)		170	1	170
TOTAL (tonnes at any one time)	1,262	7,085		5,907

As a result of the above calculations, it can be concluded that approximately 10,000 tonnes of waste can be held on the site at any one time and that the amount of waste held, when measured in tonnes, is highly influenced by the nature and density of inbound material. Taking into account the above-mentioned waste calculations, a 10,000 tonne 'at any one time' limit is considered to be appropriate and justified for the Minto facility.

4.2.6. Processing Plant

SKALA Australasia Pty Ltd (Skala) was commissioned by the business operator to design, supply and install the plant and machinery for the Minto facility (**Figure 9**). Skala is a service and equipment supplier specialising in bulk material handling and vibratory process equipment.

The Minto resource recovery facility is designed to process 100 tph (tonnes per hour) of 600kg/m³ material through a highly efficient, refined propriety designed system whilst minimising waste .

The following provides a description of Skala plant functionality at the Minto facility:

- Construction and demolition materials are tipped on the floor within Shed B.
- The mixed construction and demolition material is loaded to the processing plant via a specialised grab holding approximately 1 ton per grab and loading 4 to 5 grabs per minute.
- Once loaded the material is mechanically separated into two streams based on size for further processing. These are referred to as “overs and unders” at this point. Approximately 30% overs and 70% unders.
- Overs are hand processed in a controlled indoor environment and selected recycled materials are individually transferred to final storage bays.
- Eight storage bays measure 3.5m wide x 4.7m deep x 4m high.
- Two storage bays measure 3.5m wide x 9.4m deep and 4m high.
- The open storage bay at the end of the process in Shed C is 3.5 wide x 15m deep x 4m high.
- Metal is removed from the unders transfer line prior to secondary screening.
- The unders continue by conveyor to multiple size reduction machines.
- The various size materials from the separation/sizing process are conveyed directly to the specific storage bays.
- The size reduction equipment is designed to operate at 100 tph of input materials.
- Selected unders materials are sent for further mechanical air and vibration separations.
- These highly effective and efficient machines sort, separate and select products. These products are sent for further quality checks and are hand processed in a controlled indoor environment before being conveyed to their respective storage bays.
- Equipment selected has the highest efficiency and lowest power consumption. The machinery is isolated from the building and from adjacent slabs and floors to minimise vibration.
- Any airborne dust is suppressed by means of fine water mist, covers and hoods on machines.
- Waste product is conveyed directly to storage bay or discharged by machine directly in to an enclosed storage bay.

4.2.7. Post Processing Arrangements

There are currently over 60 sites listed on the business operator’s Tip Site Register, most of which remain active tip sites for the business on an ongoing basis. At the time of writing, processed waste is being transported to the facilities listed in **Table 7**. These arrangements are subject to change due to market and regulatory influences including but not limited to, changes to gate fees, variations conditioned in agreements, approved site capacity thresholds, processing and storage capacity, and facility operational issues such as product preferences related to what is being stored and processed at the time and weather conditions.

Table 7 – Tipping Facilities

Material	Facility Location	EPL No.
Steel	Kings Park	EPL11555
Brick and Concrete	Wetherill Park	EPL11815
Green Waste	Badgerys Creek	EPL4625
Timber	Badgerys Creek	EPL4625
	Chipping Norton	EPL2794
	Belrose	EPL4504
	Menangle	EPL3991
Paper and Cardboard	Botany	EPL1594
	St Marys	EPL20640
Heavy mixed materials	Auburn	EPL10935
	Banksmeadow	EPL12857
	Minto	EPL10638
	St Marys	EPL20621
	Smithfield	EPL20653
Unexpected Finds (e.g. batteries, gas bottles)	Various depending on item and waste classification	Various

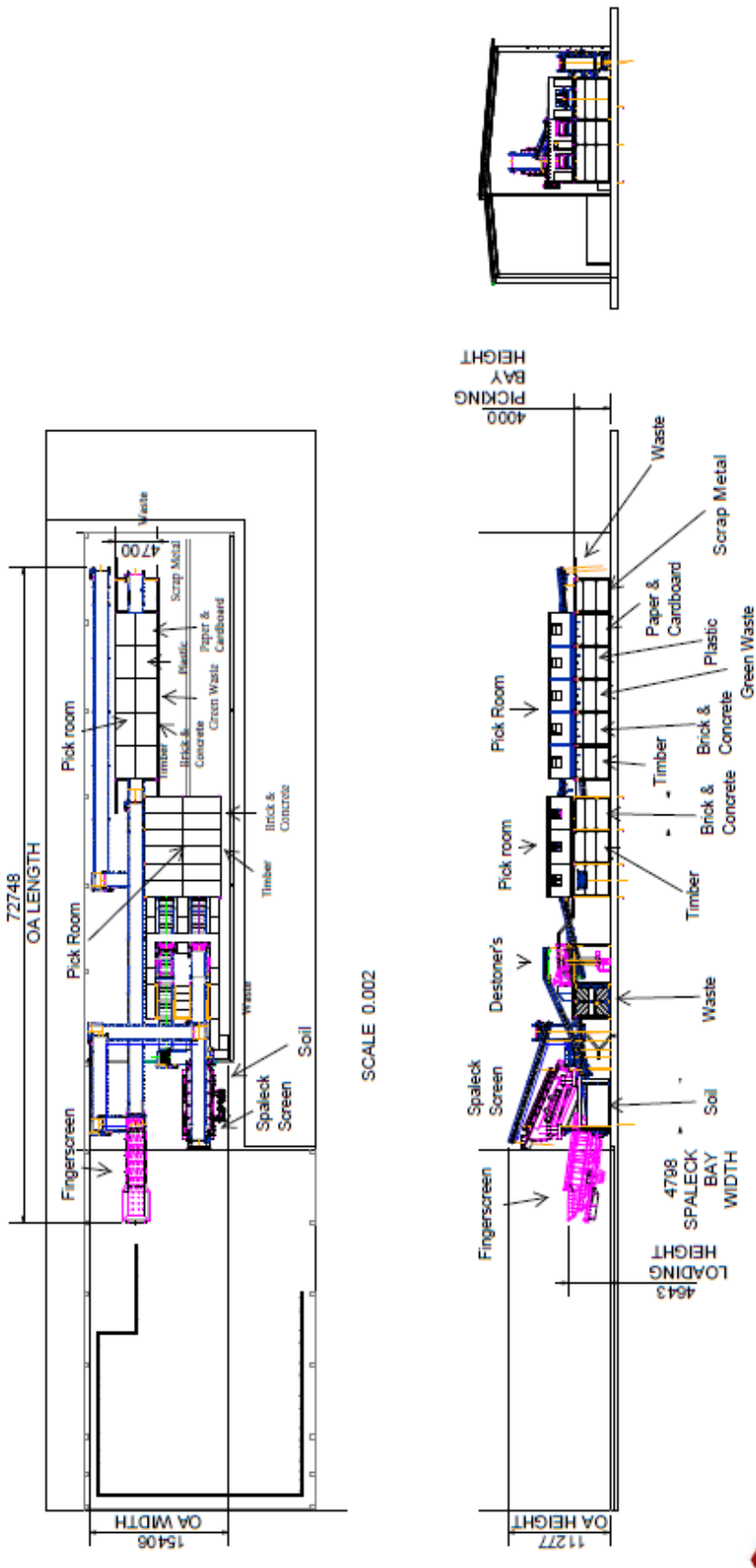


Figure 9 Proposed processing plant at the Minto facility

Source: Skala

4.2.8. Plant, Equipment and Technology

The existing and proposed plant, equipment and machinery used on site includes the following:

- Volvo ECR145C Excavator;
- Nissan Forklift;
- Volvo EC140C Excavator with Magnet Plant;
- Volvo L110F Wheel Loader;
- 20m Weighbridge (x 1) and in ground wheel wash;
- Enclosed conveyor between Shed C and Shed A;
- Existing weighbridges (x2)
- ASC Model 120 Diesel Industrial Sweeper;
- Fuel Fix 30KL Self Bunded Tank;
- Liebherr LH22M Hydraulic Excavator;
- Komatsu 3.5 tonne Forklift Model FD35AT-17; and
- In line processing / separating plant incorporating:
 - Finger Screen;
 - Magnet;
 - Picking Station; and
 - De Stoner.

Approximately 30,000 litres of diesel is stored on site within a bunded area and separated from flammable liquids. No LPG would be stored on-site as forklifts currently and will continue to use diesel fuel.

The diesel fuel store is currently contained in a bunded area separate from other flammable liquids. It is proposed to relocate the diesel fuel store to sit between Storage Shed A and the western driveway crossing. The designated fuel store area is illustrated on the proposed Site Plan (**Appendix F**).

In addition to plant and equipment required to enable processing, the following equipment / technology are deployed to mitigate impacts associated with waste processing operations:

- 'Cool Mist' Misting System within the processing building;
- Sprinkler systems to cover vehicle manoeuvring areas within the yard;
- Stormwater 360 filter at the exit of the site;
- Gate valve to control firewater runoff;
- Proposed in-ground wheel wash at existing outbound weighbridge; and
- Leachate capture sumps.

4.2.9. Hours of Operation and Staffing Arrangements

The proposed hours of operation are:

- Monday to Saturday: 6:00am to 10:00pm
- Sunday and Public Holidays: No processing operations

Table 8 provides an overview of the typical operational characteristics of the site between 6:00am and 10:00pm.

Table 8 Operational Scenarios over a 24 hour period.

INP Assessment Time Period	Operational Characteristics
Morning Shoulder (6:00 am to 7:00 am)	<ul style="list-style-type: none"> Waste processing vehicles fully operational sorting waste and loading trucks Trucks dropping off / picking up waste (4 Trucks idling, up to 5 trucks arriving and leaving during any 15 minute period at a speed of 5km/h)
Daytime (7:00 am to 6:00 pm)	<ul style="list-style-type: none"> Waste processing vehicles fully operational sorting waste and loading trucks Trucks dropping off / picking up waste (4 Trucks idling, up to 5 trucks arriving and leaving during any 15 minute period at a speed of 5km/h)
Evening (6:00 pm to 10:00 pm)	<ul style="list-style-type: none"> Waste processing vehicles fully operational sorting waste and loading trucks Trucks dropping off / picking up waste (4 Trucks idling, up to 5 trucks arriving and leaving during any 15 minute period at a speed of 5km/h)

Approximately 13 full time staff will be employed on site with.

- One (1) weighbridge / office staff;
- One (1) yard supervisor;
- Eight (8) machine/ plant operators; and
- Three (3) traffic controllers (site entrance, yard untarping area and Shed B)

A total of 10 car parking spaces would be provided on site.

4.2.10. Predicted Vehicle Movements and Routes

A Transport Impact Assessment Report is included at **Appendix G**, detailing all light and heavy vehicle movements associated with the proposal.

The TIA provides breakdown of the proposed heavy vehicle movements from the development. This breakdown shows that the site has capacity to generate a maximum of 464 heavy vehicle movements per day (two-way). This would generate an additional 376 daily two-way movements, on average, which equates to 188 vehicles.

Table 9 provides a predicted breakdown of the types of heavy vehicles which would access the site both as a percentage of movements and cumulatively.

Table 9: Proposed Vehicle Movement Breakdown based on vehicle size

Vehicle type based on weight	Proportion of vehicles %	Proportion of waste	Waste per annum (tonnes)	One-way movements per annum
Inbound Waste				
<5 tonnes	21%	3.0%	6,598	13,466
5 – 12.5 tonnes	46.48%	45.7%	100,616	29,680
12.5 – 15 tonnes	18.9%	25.3%	55,624	12,092
>15 tonnes	13.7%	26%	57,162	8,794
Subtotal	100%	100%	220,000	64,033
Outbound Waste				
<5 tonnes	0%	0%	0	0
5 – 12.5 tonnes	0%	0%	0	0
12.5 – 15 tonnes	3.3%	0.5%	1,030	278
>15 tonnes	96.7%	99.5%	208,380	8,064
Subtotal	100%	100%	209,410	8,342
Total (one-way movements)			72,375	
Total (two-way movements)			144,750	

Source: Transport Impact Assessment, TTPP

This demonstrates that the traffic generated by the future development is not directly proportional to a seven-fold increase in waste transferring through the site; rather, it correlates to the proportion of vehicle types which are transporting the waste.

The peak traffic movements of existing operations occur between 12:00pm -1:00pm, which is outside the road network peak periods of 8:00am to 9:00am and 4:00pm to 5:00pm. It is predicted that the peak periods for traffic movements would remain the same.

Trucks would enter the site from Pembury Road as illustrated below in **Figure 10**.



Figure 10 Figure 1 figure Local Road Network

Source: TTPP, Transport Impact Assessment

The distribution of the vehicle movements is estimated to be 50% from the north while the remaining 50% are from the south of the subject site. The main transport routes to and from the site will be consistent with the existing arrangements, utilising the Hume Highway and Campbelltown Road, as described in Section 2.4.1 of this EIS.

Recent bridge load limits have been imposed by Campbelltown Council at two locations along the haul routes identified in **Figure 10** and **Figure 11**. Campbelltown Council has jurisdiction over the use of local roads, including Pembury Road. The load limits restrict the movement of trucks greater than 40 tonnes on the Ben Lomond Road Bridge and trucks greater than 32 tonnes on the Airds Road Bridge over the Bow Bowling Channel.

When loaded with material, waste collection trucks departing the site can be in excess of 60 tonnes (gross weight). These trucks would be diverted via Pembroke Road to avoid the bridges on Ben Lomond Road and Airds Road. These trucks would travel to the site via the regular haul routes and travel away from the site using the Pembroke Road alternate haul route which is shown in **Figure 11**.

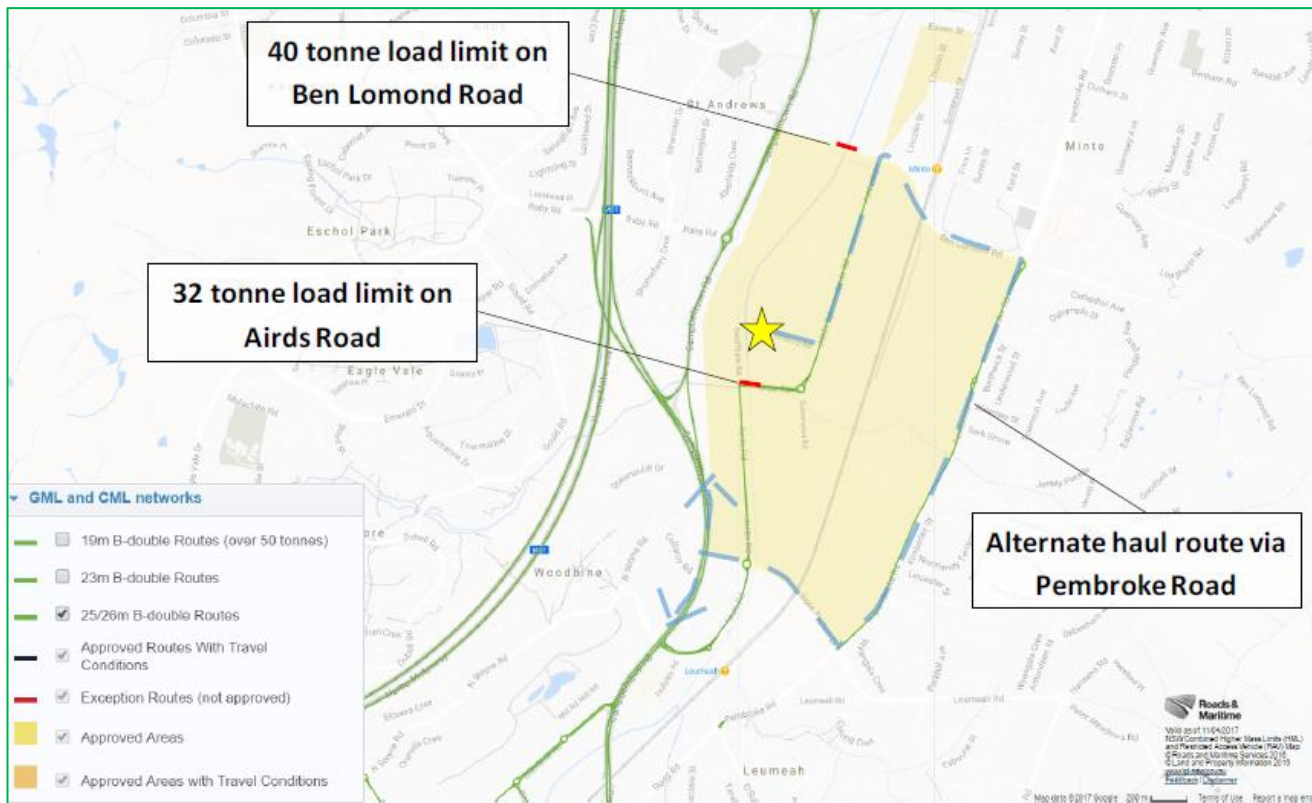


Figure 11 Alternate Outbound Haul Route for Trucks
Source *TTPP Transport Impact Assessment / RMS*

The largest vehicle accessing the site would be a 25m B-double truck, which would travel via Campbelltown Road, Plough Inn Road and in a northerly direction towards Airds Road. All other vehicles travelling to / from the site would do so along the existing travel routes, namely, Ben Lomond Road and Rose Payten Drive. The vast majority of vehicles would utilise the latter routes whereas only a limited number of trucks are to travel via Plough Inn Road.

4.3. Vehicular Access, Parking and Manoeuvring

4.3.1. Site Access and Manoeuvring

The requirements for site access, vehicular circulation and nominated turning areas (also loading and unloading space) would remain as current and is reflected in the Transport Impact Assessment (TTPP), which incorporates the site manoeuvring plan (**Appendix G**). The internal road layout of the proposed development would be utilised to accommodate forward movement by larger vehicles accessing the site to allow for 19m semi-trailers, 19.6m truck and quad dog combinations and 25m B double trucks.

All access to the site would be via the 11.5 metre wide driveway crossing with Pembury Road, and all vehicles would exit the site via two separate egresses onto Pembury Road. Both accesses can cater for all vehicle manoeuvres into/ out of the site in a forward direction. From the eastern weighbridges, trucks would turn left-in to enter the site and right out to exit the site. Vehicles on the western outbound weighbridge would make a slight right turn when exiting the site, and proceed down Pembury Road.

A Traffic Controller would be located at the site access driveway to manage in and out movements of all vehicles at the eastern access. Waste-carrying vehicles would be weighed on the inbound weighbridge and visually inspected by the Weighbridge Operator or Traffic Controller before unloading and again immediately following unloading.

Loaded vehicles would enter Shed B by undertaking a u-turn and reversing to the tip floor. Following unloading, vehicles would proceed to one of two exit points; light vehicles via the eastern exit driveway while heavy and light vehicles would use the western exit driveway.

Non-recyclable waste and recovered waste (to be sent to material-specific recovery facilities) would be transported away from the site by large trucks. Some of these trucks would arrive at the site empty and some with waste material. Once the waste material has been unloaded they are loaded up with waste in Shed A. Loaded trucks are to be weighed at the outbound weighbridges before departing the site.

4.3.2. Vehicle Stacking Arrangements

Onsite vehicle stacking spaces would be provided where trucks can queue without causing interruptions to site operations and the surrounding road network. From the stacking spaces, all inbound waste trucks are able to undertake a U-turn and reverse onto the tip floor in Shed B. From the tip floor, these trucks are able to proceed in a forward direction toward the eastern outbound weighbridge to exit the site without being restricted by stacked vehicles. Vehicles carrying inbound waste range in size from vans/small trucks to 19m semi-trailers.

After sorting and processing, the product materials are stockpiled in Shed A and transported off-site for further processing at other facilities or reuse. Larger trucks would remove waste off-site and exit the site via the new western weighbridge. Where possible, waste removal by these large trucks would be scheduled to take place outside of peak site operations to minimise conflicts between stacked vehicles and larger trucks onsite.

A total of 17 stacking spaces would be provided along the eastern boundary of the site that can satisfactorily accommodate a mixture of vehicle types, ranging from vans/utes to 19m semi-trailers. TTPP predict that it is

possible for up to 68 trucks to be able to enter the site during the busiest period, that is, between 12:00pm and 1:00pm.

TTPP predict that the proposed queuing arrangement will allow for a turnover of 51 vehicles (3 vehicles x 17 spaces) during this period. TTPP predict that there would be 62 two-way vehicle movements at the site during peak operations. Therefore, around 31 trucks would be predicted to arrive at the site between 12:00pm – 1:00pm.

4.3.3. Car Parking

A total of 10 parking spaces are proposed to service staff and visitors to the site. Car parking spaces for the development are proposed to be located toward the northern boundary of the site. Seven parking spaces positioned at the north-western corner of the site while the remaining three parking spaces would be located adjacent to the proposed site office, near the main site access.

4.3.4. Traffic and Pedestrian Access

The number of pedestrian movements throughout the site would be low and generally limited to the start/end of work shifts and at lunch time. Therefore, interaction between vehicles and pedestrians across the site would be infrequent.

Pedestrian access to the waste processing and sorting sheds would be prohibited, with permission granted only to the Traffic Controller on duty. Staff would access the sheds using the pedestrian paths provided. Pedestrians must give-way to all vehicles onsite, including trucks and mobile plant. When moving around onsite, pedestrians must keep to the designated pathway. Where the pathway intersects with a traffic route, pedestrians are required to give-way to vehicles before crossing the traffic lane.

All employees, visitors, contractors and truck drivers are required to wear high visibility clothing to enhance discernibility of pedestrians during day and night conditions. Truck drivers would be permitted to exit their vehicle only when untarping the load in preparation to enter the tip floor. Such activity would be undertaken in the stacking area and under the supervision of the Traffic Controller in the designated area.

4.4. Cost of Development

An assessment of the predicted capital investment value (CIV) has been prepared by a quantity surveyor in accordance with *NSW Planning Circular PS 10-1008* and is provided at **Appendix H**. This report outlines a CIV of \$2,422,000,000 excluding GST as being fair and reasonable for the scope of work proposed.

4.5. Construction Timeframe and Methodology

An estimated 6 week construction program has been prepared by Dewcape Pty Ltd which encompasses all construction work associated with the proposed alterations and additions to the site. Construction activities are anticipated to involve the following stages:

- Construction of a new weighbridge on the western elevation for larger trucks;
- Installation of the office building and staff amenities, and construction of a substation;
- Relocate the existing 30,000 litre fuel tank;
- Construction of an in-ground wheelwash at the existing exit weighbridge; and
- Construct concrete slab for seven parking spaces.

4.6. Stormwater

The proposed stormwater management plan for the site is shown in **Appendix I**. This plan details the following improvements / measures as part of an overall water cycle management strategy:

- Use of the existing Stormwater 360 unit;
- Installation of downpipes to new amenities and office building, connecting to the underground rainwater tank;
- Use of existing 100kL rainwater tank and associated drainage to collect runoff from all existing and proposed roofed areas;
- Connection of all external hose cocks and landscape watering system to the rainwater tank;
- Installation of 19 Ecosol gross pollutant traps (GPTs) on existing and proposed stormwater pits across the site;
- The modification of the pavement in Shed C to provide a bund to contain firewater runoff and installation of a closed leachate sump pit. Any leachate generated would be collected and disposed by an authorised liquid waste disposal company;
- Cleanout of all existing stormwater pipes and pits and verification that they are all in good working order;
- Construction of bunds for the purpose of retaining and directing site runoff; and
- Installation of a gate valve on the existing stormwater pipe at the exit of the site. The gate valve is to be operated in the event of fire or other emergency involving site inundation to retain water on-site.

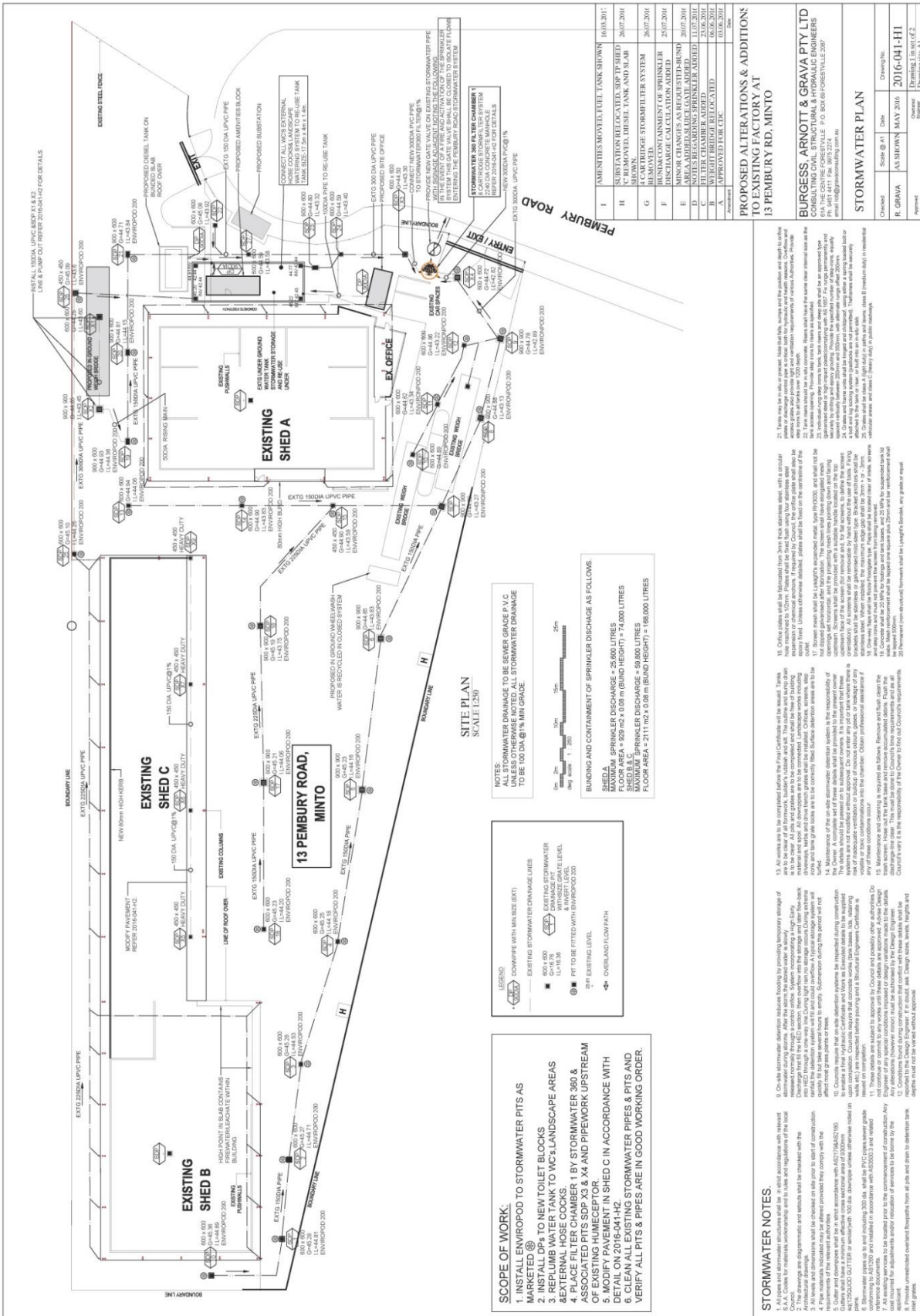


Figure 12 Stormwater Management Plan

5. Statutory and Planning Framework

5.1. Relevant Legislation, Plans and Policies

Pursuant to Section 79C (1)(a) of the EP&A Act, the following legislation, strategies, policies, planning instruments and development controls have been taken into consideration:

- Environmental Planning and Assessment Act, 1979 (EP&A Act);
- Environmental Planning and Assessment Regulation 2000 (EP&A Regs);
- Protection of the Environment Operations Act, 1997 (POEO Act);
- Protection of the Environment Operations (Waste) Regulation, 2014 (POEO Waste Regs);
- Protection of the Environment Operations (General) Regulation, 2009 (POEO General Regs);
- Contaminated Lands Management Act, 1997 (CLM Act);
- A Plan for Growing Sydney;
- NSW Waste Avoidance and Resource Recovery Strategy 2014 – 2021 (WARRS);
- State Environmental Planning Policy (State and Regional Development) 2011 (SEPP State and Regional Development);
- State Environmental Planning Policy (Infrastructure) 2007 (SEPP Infrastructure)
- State Environmental Planning Policy 55 - Remediation of Land (SEPP 55);
- State Environmental Planning Policy 33 – Hazardous and Offensive Development (SEPP 33); and
- Campbelltown Local Environmental Plan 2015 (Campbelltown LEP 2015).

5.2. Key Legislation

5.2.1. Environmental Planning and Assessment Act 1979

The EP&A Act and the EP&A Regulation provide the statutory framework for planning approval and environmental assessment in NSW. Implementation of the EP&A Act is the responsibility of the Minister for Planning, statutory authorities and local councils. Part 4 of the EP&A Act makes provision for 'development' that requires development consent from the relevant consent authority. Division 4.1 of Part 4 makes provision for SSD where the Minister for Planning (or delegate) is the consent authority.

5.2.1.1. State significant development approval process

Section 89C (2) of the EP&A Act states that:

A State environmental planning policy may declare any development, or any class or description of development, to be State significant development.

Under clause 8 of the State and Regional Development SEPP, development is declared to be State Significant Development for the purposes of the EP&A Act if, among other provisions, the development is specified in Schedule 1 or 2 of SEPP State and Regional Development. Clause 23(3) of Schedule 1 of the State and Regional Development SEPP relates to waste or resource management facilities and makes provision for *development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.*

It is proposed that the handling capacity of the existing resource recovery facility be increased to 220,000 tonnes of waste per year. On this basis, the proposal satisfies the criteria contained in Clause 23 in Schedule 1 of the State and Regional Development SEPP.

Based on the proposed handling capacities of the Minto resource recovery facility, being 220,000 tonnes per annum, the development is classified as State Significant Development.

Division 23 of *State Environmental Planning Policy (Infrastructure) 2007* allows for the establishment and operation of a waste or resource management facility on land within a prescribed zone such as IN1 General Industrial with development consent. The provisions of the SEPP prevail over the Campbelltown LEP 2015 in this regard. As such, the proposed development is permissible with development consent.

On 4 December 2015, on behalf of Minto Recycling Pty Ltd, APP sought SEARs from the Department of Planning for the increased capacity at the subject site. On 28 January 2016, the SEARs for the Minto SSD Application was issued by the DPE.

Under section 89D of the Act, the NSW Minister for Planning or his delegate is the consent authority for SSD.

5.2.1.2. Matters for consideration

When assessing a DA for SSD, the consent authority (i.e. Minister for Planning or delegate) is required to take into consideration the matters outlined in section 79C of the EP&A Act:

In determining a development application, a consent authority is to take into consideration such of the following matters as are of relevance to the development the subject of the development application:

(a) the provisions of:

(i) any environmental planning instrument, and

(ii) any proposed instrument that is or has been the subject of public consultation under this Act and that has been notified to the consent authority (unless the Secretary has notified the consent authority that the making of the proposed instrument has been deferred indefinitely or has not been approved), and

(iii) any development control plan, and

- (iii) any planning agreement that has been entered into under section 93F, or any draft planning agreement that a developer has offered to enter into under section 93F, and*
- (iv) the regulations (to the extent that they prescribe matters for the purposes of this paragraph), and*
- (v) any coastal zone management plan (within the meaning of the Coastal Protection Act 1979), that apply to the land to which the development application relates,*
- (b) the likely impacts of that development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality,*
- (c) the suitability of the site for the development,*
- (d) any submissions made in accordance with this Act or the regulations, and*
- (e) the public interest.*

Despite the above, clause 11 of the State and Regional Development SEPP states that development control plans (DCPs) do not apply to SSD.

5.2.1.3. Approvals not required or which cannot be refused

Under section 89J of the EP&A Act, the following authorisations are not required for SSD:

- (a) the concurrence under Part 3 of the Coastal Protection Act 1979 of the Minister administering that Part of that Act,*
- (b) a permit under section 201, 205 or 219 of the Fisheries Management Act 1994,*
- (c) an approval under Part 4, or an excavation permit under section 139, of the Heritage Act 1977,*
- (d) an Aboriginal heritage impact permit under section 90 of the National Parks and Wildlife Act 1974,*
- (e) an authorisation referred to in section 12 of the Native Vegetation Act 2003 (or under any Act repealed by that Act) to clear native vegetation or State protected land,*
- (f) a bush fire safety authority under section 100B of the Rural Fires Act 1997,*
- (g) a water use approval under section 89, a water management work approval under section 90 or an activity approval (other than an aquifer interference approval) under section 91 of the Water Management Act 2000.*

Further, under section 89K of the Act, the following authorisations cannot be refused and are to be substantially consistent with a development consent issued for SSD:

- (a) an aquaculture permit under section 144 of the Fisheries Management Act 1994,*
- (b) an approval under section 15 of the Mine Subsidence Compensation Act 1961,*
- (c) a mining lease under the Mining Act 1992,*
- (d) a production lease under the Petroleum (Onshore) Act 1991,*
- (e) an environment protection licence under Chapter 3 of the Protection of the Environment Operations Act 1997 (for any of the purposes referred to in section 43 of that Act),*
- (f) a consent under section 138 of the Roads Act 1993,*
- (g) a licence under the Pipelines Act 1967.*

The matters for consideration that apply to the project are discussed below.

5.2.2. Protection of the Environment Operations Act, 1997

The *POEO Act* provides the regulatory framework and licensing requirements for certain activities. As the site is a scheduled activity as described in Schedule 1 of the *POEO Act*, and is proposed to receive and process more than 6,000 tonnes of general waste per annum, it is a premises-based activity under Clause 34(3) of Schedule 1 of the *POEO Act*. The facility operates under an EPL administered by the EPA under Section 43(b) of the *POEO Act*. Current operations take place under EPL 20638, however this license would need to be amended to reflect proposed operations, as described in Section 4 of this report.

5.2.3. Other Relevant NSW State Legislation

Table 10 details other legislation that has been considered in the preparation of the EIS and describes the relevance to the proposal:

Table 10: NSW State Legislations

Legislation	Relevance to the Site / Development
Contaminated Lands Management Act, 1997	The site is not listed on the Contaminated Lands Register, maintained by the EPA.
Heritage Act, 1977	No items of state heritage significance have been identified within the locality.
Roads Act 1993	The RMS and Council have been consulted during the preparation of the EIS. The advice provided has been prepared with regard given to the Roads Act 1993 and considered in the preparation of the EIS (refer to Section 6.8 and supporting Transport Impact Assessment (Appendix G))
Threatened Species Conservation Act, 1995	The development will not damage critical or other habitat and is not likely to have a significant effect on threatened species, populations, or ecological communities or their habitats.

5.3. Planning Instruments and Strategies

5.3.1. A Plan for Growing Sydney

A Plan for Growing Sydney (the Plan) identifies a number of centres and corridors across metropolitan Sydney within which urban renewal will result in the generation of significant volumes of waste products associated with demolition and construction work. The Plan seeks to provide sustained growth for Sydney, improve its productivity and competitiveness, and foster higher living standards across the metropolitan region.

The Plan makes the intensive development of strategic locations across Sydney a priority, including the Sydney CBD, the Global Economic Corridor, Greater Parramatta, Growth Centres and gateway precincts including the port and airports.

The strategy also identifies key strategic centres and priority precincts across the metropolitan region. The strategy predicts that targeted growth in these locations will sustain and expand the economy while supporting more jobs closer to where people live.

The proposal is sited within the precinct identified as the Greater Macarthur Priority Growth Area. The implementation of the strategic plans to support this Priority Area will generate significant volumes of building and construction waste which will need to be supported by appropriately located waste management and resource recovery facilities such as the Subject Site.

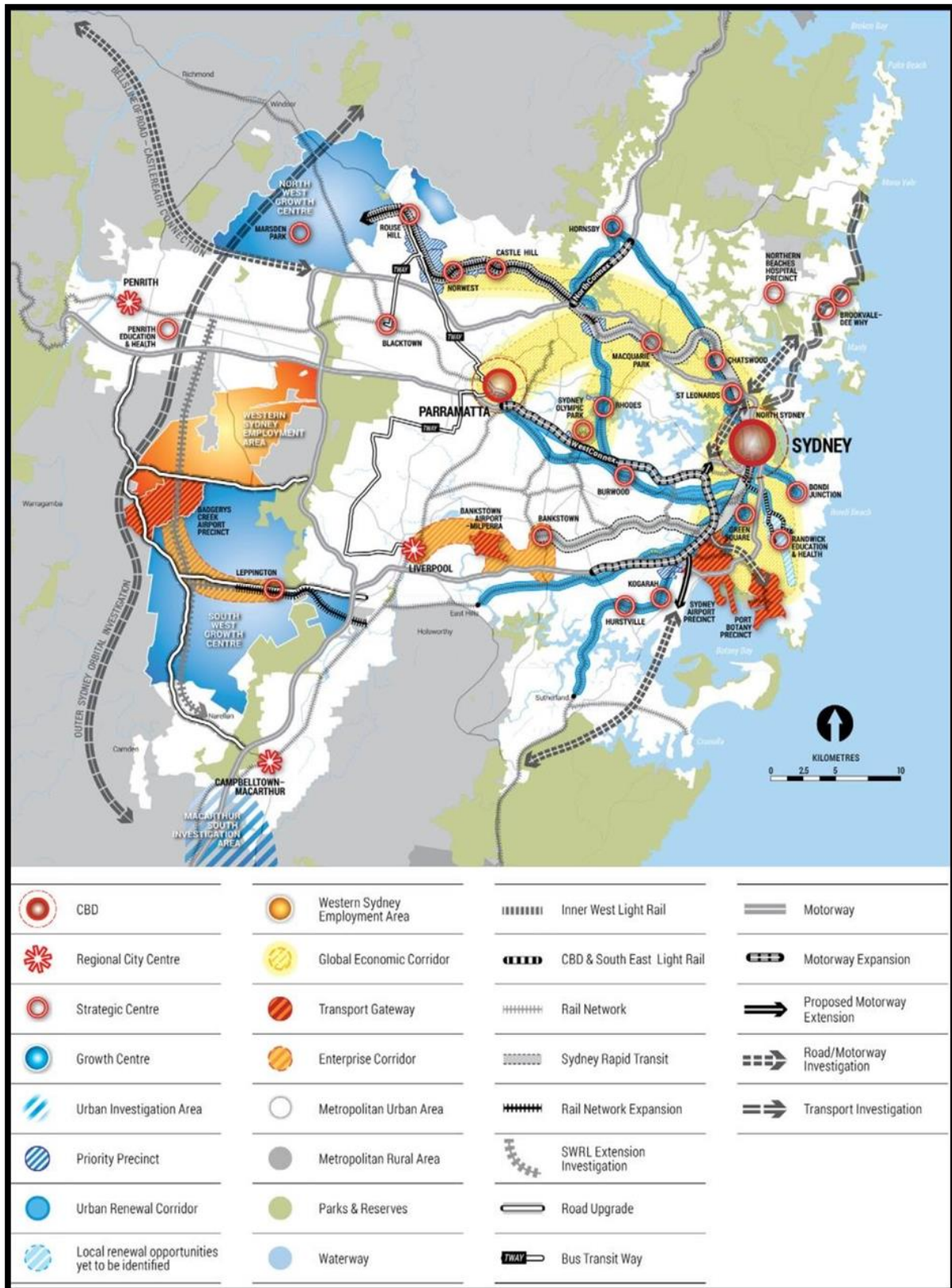


Figure 13 A Plan for Growing Sydney

Source: A Plan for Growing Sydney, Department of Planning and Environment

Figure 13 illustrates the proximity of the subject site to identified urban renewal corridors, enterprise corridors and key strategic centres at Leppington and Wilton, and significant road upgrades and infrastructure works associated with the South West Growth Corridor.

The efficient handling and management of waste, as outlined in the *WARRS*, (See **Section 5.3.8**) will play a key role in the delivery of the key objectives of the plan. Critical to the success of the strategy will be the provision of strategically located waste management and resource recovery facilities capable of handling a variety of waste streams, with a particular emphasis on those capable of processing construction and demolition waste. Relying on facilities at the metropolitan periphery or facilities with limited capacities to support the predicted volumes of waste will place an unnecessary burden on road infrastructure as well as increasing the cost of waste handling through increased transportation costs.

The *Plan for Growing Sydney* identifies the need for additional waste management and recycling infrastructure, including landfill and liquid waste processing capacity, noting the need for:

- additional recycling infrastructure capacity of 165,000 tonnes per year for municipal (local council) waste;
- *additional recycling infrastructure capacity of 380,000 tonnes per year for commercial and industrial waste; and*
- *an additional 25 community recycling centres for recycling of household hazardous waste.*

The proponent is keen to support the Government's response to this shortage by identifying and protecting appropriate locations for waste management infrastructure in Sydney. It should be noted that the waste types appearing in the waste streams identified in the first two bullet points above contain many waste types that are consistent with materials derived from the construction and demolition and commercial and industrial sources.

The projections over a 20-year period, estimate an additional 3.3 million tonnes of municipal waste and 7.6 million tonnes of commercial and industrial waste which are indicators for the need for the current business operation to extend its services and operation hours to respond to the effective management of waste and maximise reuse and recycling of Sydney's waste.

The State Significant Development proposal for the Minto facility will assist in achieving a key objective of this plan by providing suitably located resource recovery facilities. To achieve the objectives of the Plan for Growing Sydney, it is imperative that facilities such as the Minto facility are given the necessary support to ensure that NSW has the capability to reduce demand on landfill to better manage the impact of development on the environment.

In this regard, the proposal will assist in achieving a key objective of this plan as waste materials generated by these sources contain significant General Solid Waste (non-putrescible) types consistent with those proposed for the facility, further the proposal will also achieve the proposed mandated 75% recycled target..

The proponent is keen to meet the waste challenge by providing Sydney with best practice technology and logistics support to maximise safe reuse and recycling of valuable resources.

5.3.2. State Environmental Planning Policy (Infrastructure) 2007

State Environmental Planning Policy (Infrastructure) 2007 (Infrastructure SEPP) commenced on 1 January 2008 and contains specific planning provisions and development controls for a range of infrastructure works or facilities. The Infrastructure SEPP aims to facilitate the effective delivery of infrastructure across the State.

Division 23 of *State Environmental Planning Policy (Infrastructure) 2007* permits the establishment and operation of a waste or resource management facility on land zoned IN1 General Industrial with development consent. Specifically, Clause 120(c) identifies IN1 General Industrial Zone as a prescribed zone. Clause 121(1) states that development for the purposes of waste or resource management facilities may be carried out by any person with consent on land in a prescribed zone. The provisions of the SEPP prevail over the Campbelltown LEP 2015 in this regard. As such, the proposed development is permissible with development consent.

Schedule 3 of the Infrastructure SEPP applies to traffic generating development and lists those activities which are required to be referred to the Roads and Maritime Services. It states that landfill, recycling facilities, waste transfer station of any size or capacity with access to any road is to be referred to the RMS.

5.3.3. State Environmental Planning Policy (State and Regional Development) 2011

The aim of the State and Regional Development SEPP is to identify development that is considered to be State Significant Development (SSD), State Significant Infrastructure or Critical State Significant Infrastructure. Under clause 8 of the State and Regional Development SEPP, development is declared to be State Significant Development for the purposes of the EP&A Act if, among other provisions, the development is specified in Schedule 1 or 2 of SEPP State and Regional Development. Clause 23(3) of Schedule 1 of the State and Regional Development SEPP relates to waste and resource management facilities and states:

23 **Waste and resource management facilities**

- (1) *Development for the purpose of regional putrescible landfills or an extension to a regional putrescible landfill that:*
 - (a) *has a capacity to receive more than 75,000 tonnes per year of putrescible waste, or*
 - (b) *has a capacity to receive more than 650,000 tonnes of putrescible waste over the life of the site, or*
 - (c) *is located in an environmentally sensitive area of State significance.*
- (2) *Development for the purpose of waste or resource transfer stations in metropolitan areas of the Sydney region that handle more than 100,000 tonnes per year of waste.*
- (3) *Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.*
- (4) *Development for the purpose of waste incineration that handles more than 1,000 tonnes per year of waste.*
- (5) *Development for the purpose of hazardous waste facilities that transfer, store or dispose of solid or liquid waste classified in the Australian Dangerous Goods Code or medical, cytotoxic or quarantine waste that handles more than 1,000 tonnes per year of waste.*
- (6) *Development for the purpose of any other liquid waste depot that treats, stores or disposes of industrial liquid waste and:*
 - (a) *handles more than 10,000 tonnes per year of liquid food or grease trap waste, or*
 - (b) *handles more than 1,000 tonnes per year of other aqueous or non-aqueous liquid industrial waste.*

It is proposed that the processing capacity of the existing facility be limited to 220,000 tonnes of waste per year and on this basis, the proposal clearly satisfies the criteria contained in Clause 23 in Schedule 1 of the State and Regional Development SEPP.

5.3.4. State Environmental Planning Policy No. 55 – Remediation of Land

SEPP 55 requires that a consent authority must not consent to the development of any land unless it has considered whether the land is contaminated. This means that the consent authority must routinely consider whether land is suitable for a proposed use in terms of the risk from contamination. The policy states that land must not be developed if it is unsuitable for a proposed use because it is contaminated.

If the land is unsuitable, remediation must take place before the land is developed. *Managing Land Contamination Planning Guidelines SEPP 55–Remediation of Land* provides a decision-making framework to assist authorities carrying out planning functions under the *EP&A Act 1979* and guidance for proponents pursuing a rezoning, development consent or modification under the Act. In the case of the subject application, the planning authority is compelled to consider whether the land is suitable, or can and will be made suitable.

An initial evaluation of the site, including an understanding of the current site use and historical uses has been undertaken in accordance with Section 3.2 of the Guideline. Recent and historical land uses have triggered the preparation of a Stage 1 or 'Phase 1' Preliminary Investigation, a copy of which is found at **Appendix J**.

The objectives of this investigation were to:

- Make an assessment of the potential for land contamination to be present at the site, as a result of past and present land use activities;
- Identify areas of environmental concern (AEC) and associated contaminants of potential concern (COPC) at the site;
- Assess the likelihood of those COPC being present on site; and
- Provide recommendations for further investigation of the site, in the context of the SEARS issued.

In undertaking an assessment of the site the investigation included:

- Consideration of site history, including a review of aerial photographs and Council's records of historical approvals;
- Land title searches;
- A search of NSW EPA contaminated lands register maintained under Section 58 of the *Contaminated Lands Management Act, 1997*;
- A search of the NSW EPA POEO Act public register;
- A search of the Safework NSW stored chemical information database;
- Consideration of a planning certificate issued by Campbelltown City Council under Section 149(2) of the EP&A Act; and
- A site walk over and observations of adjacent land uses.

The report finds that the likelihood of contamination being present from current land activities has been determined as low due to majority of the site being covered in good to fair condition hardstand, limiting ability of contaminants to enter underlying soils. The likelihood of contamination being present from historic activities has been determined as low to medium due to the ground surface being unsealed during construction.

The AECs identified on the site in the investigation report, include:

- On site waste receipt, handling and transfer;
- On-site fuel storage and dispensing;
- Operation as a transport depot;
- Historic on-site activities including dairy farming and commercial/industrial activities; and
- Potential historic importation of soil.

The investigation report does not identify AECs in association with potential off-site sources of contamination.

The investigation report concludes that the qualitative likelihood of soil contamination being present on the site, as a result of the identified AECs, is considered low to medium. The investigation report recommends additional investigations in the form of soil sampling to refine the level of certainty in areas where future soil disturbance is proposed.

5.3.5. State Environmental Planning Policy No. 33 – Hazardous and Offensive Development

SEPP 33 aims to ensure that in determining whether a development is a hazardous or offensive industry, any measures proposed to be employed to reduce the impact of the development are taken into account. Where an application seeks to carry out potentially hazardous or offensive development, the consent authority has sufficient information to assess whether the development is hazardous or offensive and impose conditions to reduce or minimise any adverse impacts.

In determining whether a development is a hazardous storage establishment, hazardous industry or other potentially hazardous industry, or an offensive storage establishment, offensive industry or other potentially offensive industry, consideration must be given to the relevant circulars or guidelines published by the then Department of Planning and Infrastructure relating to hazardous or offensive development.

Applying SEPP 33 – Hazardous and Offensive Development Application Guidelines (DoP, 2011) is the relevant guideline to determine whether the development is a potentially hazardous or potentially offensive industry. This guideline requires a screening assessment of hazards associated with the storage and transportation of dangerous goods and hazardous materials as part of the proposed development to determine whether further assessment, in the form of a preliminary hazard analysis is required. SEPP 33 requires that proponents who wish to carry out a potentially hazardous industry must prepare a preliminary hazard analysis in accordance with the current circulars or guidelines and submit the analysis with the development application.

A preliminary risk screening and hazard assessment has been completed in accordance with the relevant guideline and can be found at **Appendix K**. The Preliminary Risk Screening Report and Section 6.5 of this submission provide a clear description of the classes, quantities and location of all dangerous goods and hazardous materials to be associated with the operation of the development. This report determines that the screenings for the storage of dangerous goods indicate that the development would not be classified as a hazardous or offensive industry; hence the requirements of SEPP 33 have been addressed.

5.3.6. Campbelltown Local Environmental Plan, 2015

The Campbelltown Local Environmental Plan 2015 (CLEP) applies to the subject site.

5.3.6.1. Zoning and Permissibility

The subject site is situated in the IN1 General Industrial Zone under the CLEP 2015 (refer to zoning extract included at **Figure 14**). Whilst a “resource recovery facility” is prohibited under the CLEP 2015, Division 23 of State Environmental Planning Policy (Infrastructure) 2007 permits the establishment and operation of a waste or resource management facility on land zoned IN1 General Industrial with development consent. The provisions of the SEPP prevail over the CLEP 2015 in this regard. As such the proposed development is permissible with development consent.

The proposed “resource recovery facility” falls within the group definition of a “waste or resource management facility” which means any of the following:

- (a) a resource recovery facility,
- (b) a waste disposal facility,
- (c) a waste or resource transfer station,
- (d) a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).

A resource recovery facility means a *building or place used for the recovery of resources from waste, including works or activities such as separating and sorting, processing or treating the waste, composting, temporary storage, transfer or sale of recovered resources, energy generation from gases and water treatment, but not including re-manufacture or disposal of the material by landfill or incineration.*

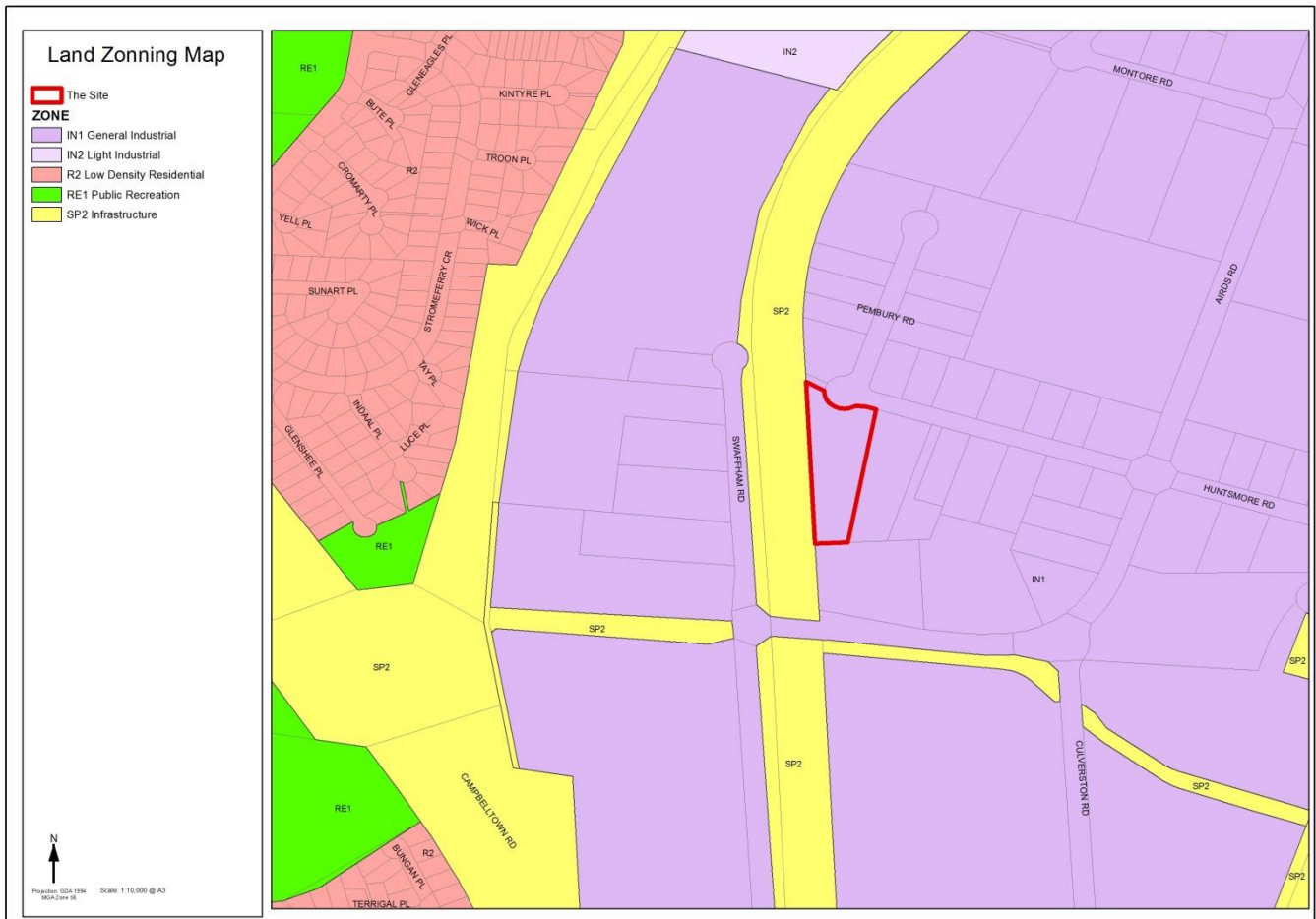


Figure 14 Zoning Extract

Source: Campbelltown LEP 2015

The following is an assessment of the proposed development against the objectives of the IN1 General Industrial zone.

- *To provide a wide range of industrial and warehouse land uses.*

Comment: Whilst the subject application does not represent a change of use, the existing resource recovery facility supports businesses within the industrial area of Minto. Surrounding development is typified by a mix of light industrial/commercial developments including light industrial warehouses, an office equipment supplier, auto repair shops, consulting engineers and freighters. There are no other resource recovery facilities in the area to service surrounding businesses and the local community. In this regard, the development would continue to contribute to the wide range of industrial uses in the locality.

- *To encourage employment opportunities.*

Comment: The proposed site expansion would provide additional employment opportunities from 6 to approximately 13 staff which may vary according to operational demand for the service offered by the facility. The facility employs a wide range of skill sets which range from unskilled to skilled employees, each of which contribute towards an efficient site operation.

Apart from the immediate employment opportunities generated from the increased throughput at the Minto facility, there would be other benefits of employing staff to support the wider operation of the business such as drivers, sales persons, call centre operators and administrators amongst others who make the business operation possible.

- *To minimise any adverse effect of industry on other land uses.*

Comment: Section 6 of this EIS provides a comprehensive assessment of the likely impacts of the proposed development on the receiving environment, including non-industrial / residential receivers. This assessment includes measures required to minimise any impacts the proposal may have on other land uses and addresses the timing and implementation of such measures and management practices. Such recommendations have been derived from technical assessments undertaken for the proposal in relation to the relevant policy framework and guidelines.

The nature of the increased processing capacity sought is such that any operational impacts can be mitigated and are not predicted to have a detrimental impact on the operations of other industrial development found in the locality. It is expected that successful implementation of proposed mitigation measures and management practices would minimise adverse impacts of the proposal on other land uses, in particular residential receivers.

- *To support and protect industrial land for industrial uses.*

Comment: The proposed development is ideally situated within an industrial area and is appropriately characterised as an industrial land use. Approval of the subject application would see the retention of this industry in the industrial precinct, reinforcing the desired land use mix and typology as expressed in the Campbelltown LEP 2015.

The increased throughput sought under this SSD application would support the ongoing economic viability of the Minto industrial precinct. This will be achieved by providing cost efficient waste handling and resource recovery associated with the day to day operation of a range of businesses in the area as needed as well as providing for the efficient handling and recovery of waste products associated with demolition, construction and infrastructure projects across the LGA and beyond. The Minto facility provides services to businesses in the area such as the transport company and vehicle repairs businesses in Pembury Street whilst other businesses in the area use the facility as and when needed.

- *To provide for a range of facilities and services to meet the day to day needs of workers in the area.*

Comment: Since the use of the site will not change, the proposed development would not adversely impact on the operations of other land uses / service industries found in the immediate locality. The proposed increase in staff numbers associated with the facility would support the long-term viability of such services.

- *To enable non-industrial land uses that are compatible with and do not detract from industrial and warehouse uses or impact on the viability of existing centres.*

Comment: The current industrial use of the Minto facility does not detract from industrial and warehouse uses in the area and its ongoing operation would contribute towards the viability of existing Minto industrial centre.

- *To facilitate diverse and sustainable means of access and movement.*

Comment: Approval of the proposed expansion of the existing facility would result in an optimal use of the land. An approval would also result in improvements to vehicle access and movement within the site (e.g. third weighbridge) which would allow for the site to operate in a safe and efficient manner along with improved amenity for all staff. Vehicle swept paths have also identified easy access and egress of vehicles to and from the site and also unconstrained vehicle movements within the site.

The facility also has benefit of good road infrastructure in the form of the Hume Highway for easy access to the facility. The proximity of the facility to key urban growth corridors and infrastructure projects would allow for the efficient transportation of waste products to and from the site. This would improve the operating capacity of road infrastructure by reducing the distance that waste needs to be transported from its source.

- *To ensure that any commercial, retail or other non-industrial development is not likely to adversely affect employment generating activities or opportunities.*

Comment: The Proposal is for the expansion of an existing industrial development which has been in operation in the area for 10 years. There has been no disruption to adjacent businesses and the operator has good relations with adjoining businesses in the area since taking occupation of the site. This has been confirmed by other businesses in the area using the services offered by the facility as identified above. The business operator also supports the employment of local labour.

5.3.6.2. Principal Development Standards

Consideration was given to the development standards relevant to the proposal including:

- Height of Buildings



Figure 15 Height of Buildings

Source: Campbelltown LEP 2015

This proposal includes the construction of a new 600 kw electrical substation with an approximate height of not more than 2 metres (subject to detailed design), as well as an amenities block (2.6m) and site office (2.6m) which are within the maximum building height limit of 12.9m, as provided for in **Figure 15**. There is no proposal to increase the height of the current built form and there are no amenity impacts from the height of the proposed structures on the site, hence the LEP height objectives are achieved.

- Floor Space Ratio

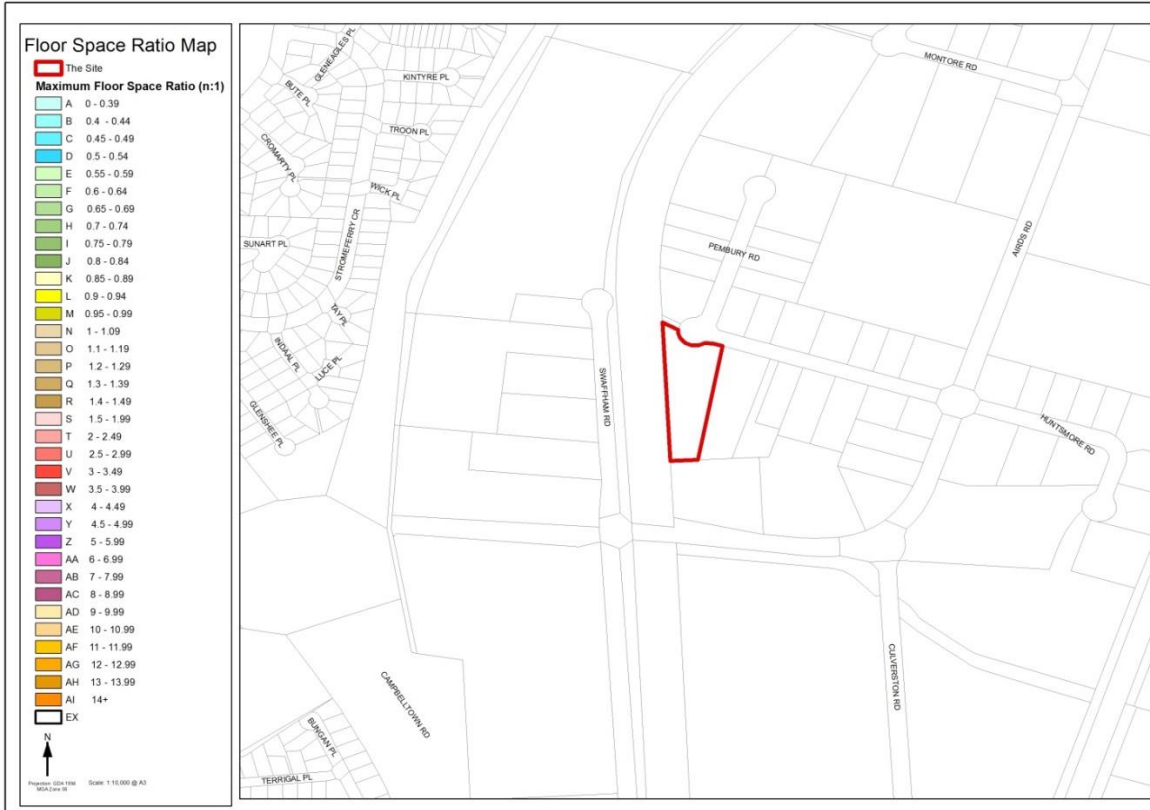


Figure 16 Floor Space Ratio Map

Source: Campbelltown LEP 2015

As reflected in **Figure 16**, there is no site specific FSR control. Notwithstanding this, the proposal seeks to include a new amenities and site office. The proposed building works achieves the FSR objectives of the LEP by controlling the bulk and scale of development on the site. The proposed structures would not have any negative visual impacts or disrupt views in the local area.

5.3.6.3. Other Provisions

No other local or miscellaneous provisions are of any particular relevance to the assessment of the subject application or require further consideration to determine the likely impacts of the proposal.

5.3.7. Campbelltown City Section 94 Contributions Plan 2016

A review of the Campbelltown City Section 94 Contributions Plan, 2016 was undertaken. This Plan does not include any provision to levy contributions for the type of development proposed. Similarly, the subject site is not within a catchment or precinct identified within the plan which would otherwise apply developer contributions to the proposal.

Council has adopted a Section 94A plan, which applies to all land within the Campbelltown Local Government Area. The proposal does not fall within the description of any of the types of development which are exceptions to this plan. This plan would enable Council to levy developer contributions at a rate of 1% of the cost of construction. Within the CIV Report provided at **Appendix H**, it notes the cost of construction to be \$2,400,000 excluding GST.

5.3.8. NSW Waste Avoidance and Resource Recovery Strategy 2014 - 2021

The *NSW Waste Avoidance and Resource Recovery Strategy, 2014-21*, (WARRS) adopted December, 2014 which sets targets for increasing recycling across the State and has the following general aims and objectives:

- Preventing and avoiding waste;
- Increasing recovery and use of secondary materials;
- Reducing toxicity in products and materials; and
- Reducing litter and dumping.

To achieve these objectives, five focus areas are identified in the WARRS and are provided below:

- Making it easier for households to manage their waste;
- Making it easier for businesses to manage their waste;
- Reducing or removing problem wastes from the waste streams to ensure that resource recovery is cost effective and produces environmentally safe materials;
- Facilitating investment in waste infrastructure; and
- Reducing litter and combating illegal dumping.

In broad terms, the proposal would assist the State in achieving its goals of increasing the recovery and reuse of materials and preventing and avoiding waste. More specifically, the WARRS sets the following targets for recycling by 2021 – 2022:

- *Municipal solid waste from 52% (in 2010- 11) to 70%;*
- *Commercial and industrial waste from 57% (in 2010 – 11) to 70%; and*
- *Construction and demolition waste from 75% (in 2010-11) to 80%.*

While strategies relating to education, economic incentives, industrial ecology, interagency consultation and product stewardship underpin the delivery of the WARRS objectives, it is imperative that waste handling and processing is undertaken in a cost effective and market driven manner. This necessitates the need to provide waste or resource management facilities capable of accepting and processing the predicted increased volume of waste types, with a particular emphasis to those capable of recycling and resource recovery.

The existing facility contributes to achieving the broader objectives of the strategy, however the limitations on operations curtail the opportunity to accept, recycle and recover a greater volume of waste in a more efficient and cost effective manner. As such, the proposed increase in operating capacity will go much further to achieve key targets identified in the WARRS in a manner which will have minimal impact on the receiving environment.

5.3.9. Summary of Approvals and Licenses

Table 11 contains a summary of the licences, approvals and permits that are likely to be required for the project.

Table 11: Summary of Authority Approvals

Legislation	Authorisation	Consent or Approval Authority
EP & A Act	Development Consent	Minister for Planning or delegate
	Construction Certificate required prior to the commencement of building works	Campbelltown City Council or Private Certifier
	Occupation Certificate required prior to the use of the facility	Campbelltown City Council or Private Certifier
POEO Act	Environment Protection Licence	Environment Protection Authority

6. Environmental Assessment

This section provides an assessment of the potential environmental impacts associated with the proposed development against the terms of the SEARs (dated 28/01/2016) and the matters for consideration, set out in clauses 6 and 7 of Schedule 2 of the Regulations, and section 79C(1) of the Act, relevant to the proposal and associated mitigation measures.

The key environmental and planning matters associated with the proposed development are as follows:

- Site operations and justification for increased capacity;
- Visual impacts and built form;
- Noise impact;
- Air quality, odour and Greenhouse gas emissions;
- Hazards;
- Waste management;
- Soil and water;
- Contamination;
- Access, traffic and parking;
- Fire safety;
- Cumulative impacts; and
- Summary of mitigation measures.

6.1. Site operations and justification for increased capacity

6.1.1. Need for Extended Hours of Operation

Truck movements (including loading and unloading) are proposed to occur between 6:00am and 10:00pm. The site operator requires this time to service its clients' needs as well as increase its operational efficiency as justified below.

- Infrastructure contracts

Most night-time deliveries would be from major infrastructure contracts won by the site operator. These contracts are mostly in the form of road and railway projects and are predicted to require waste removal at night. The night-time operation would be in the form of scheduled loads to the Minto facility as agreed between the operator and its clients. It is believed that these vehicle movements would maximise waste management effectiveness outside the standard daytime hours.

- Distribution of vehicles

The extension of operating hours would allow for a greater distribution of vehicles over a longer period of time. This is consistent with the waste disposal needs of the various large infrastructure projects currently serviced by the site operator, where waste removal outside of peak periods and day time business operating hours is operationally preferred. The distribution of vehicles would effectively 'flatten' the peak activity outside of the current road network peak period to assist in reducing day-time traffic to the site and on the road network.

The extended operating hours would benefit the operation of the Minto facility since some waste, in particular bulk loads from infrastructure projects, would be delivered to the facility and unloaded during extended hours. It is preferable that the majority of processed materials are loaded and transported off-site during the extended hours.

- Amenity Impacts

Operations proposed during the 'night time' period are limited to the morning shoulder period of 6:00am to 7:00am.

The operator is dedicated to ensuring both evening and night-time (morning shoulder) operations and removal of waste would function harmoniously with each other. The site operator uses the latest logistics planning and software for its own fleet to maximise collection whilst minimising on-road truck movements. This controlled operation would ensure there are no conflicts or overlap with deliveries and removal of waste to maintain minimal disturbance to the local amenity.

Evening and Night-time (morning shoulder) operational impacts have been assessed by the environmental consultants (SLR Consulting) and the traffic consultants (TTPP) who confirmed that there would be minimal, if any impacts to the environment, the local community and the local road network.

In conclusion, the extended hours of operation would:

- Support current and future infrastructure projects in the region;
- Assist in spreading vehicle movements to and from the facility over an extended period;
- Reduce vehicle movements over peak times;
- Assist site operations by conveniently removing processed materials from the site during the extended hours; and
- Result in minimal, if any impacts on the environment, the local community and the local road network as assessed in this Environmental Impact Statement.

6.1.2. Correlation between Material Types and Vehicle Movements

It is expected that the majority of material received at the Minto facility would be heavy mixed waste material such as soil, brick and concrete, rock, sandstone and timber. These are the most common types of waste received, particularly from infrastructure projects.

The site operator has acquired tenders for several infrastructure projects which has resulted in feed streams of approximately 75% of construction and demolition waste and 20% soil being processed through the site. The remainder 5% of waste streams are insignificant and comprise of wood, non-chemical manufacturing waste, asphalt, paper and cardboard, household waste (municipal clean-up), office and packaging, Virgin Excavated Natural Material (VENM) and other non-putrescible general solid waste materials.

Generally, these materials are collected in vehicles which have a relatively large cubic metre capacity. This effectively means that the 220,000-tonne limit (if one assumes that it is reached over any prescribed 12-month period) would be received by fewer vehicles because:

- the vehicles delivering material to the facility would have a larger Gross Vehicle Mass (GVM) and therefore increased net capacity; and
- the density per cubic metre of material from the infrastructure projects is expected to be significantly greater than the average density of total material received by the facility.

6.2. Visual Impact and Built Form

The proposal includes the construction of an electrical substation, office and amenities building, wheel wash and a third weighbridge to facilitate the expansion and operation of the site. A full description of the works is provided in **Section 4** of the EIS.

As described in **Section 3**, the site benefits from having minimal exposure to the public domain and is centrally located within a broader industrial precinct. The industrial buildings situated on adjoining properties have sufficient height to provide an effective screen around most of the site, with the exclusion of the 11.5 metre driveway crossing. As such, processing and storage areas are not visible from the public domain or any adjoining properties, with the exception of a narrow view into the site from its driveway entrance at Pembury Road. This is illustrated in the images below of the site and surrounds.



Plate 1: Exit weighbridge and existing office at Shed A

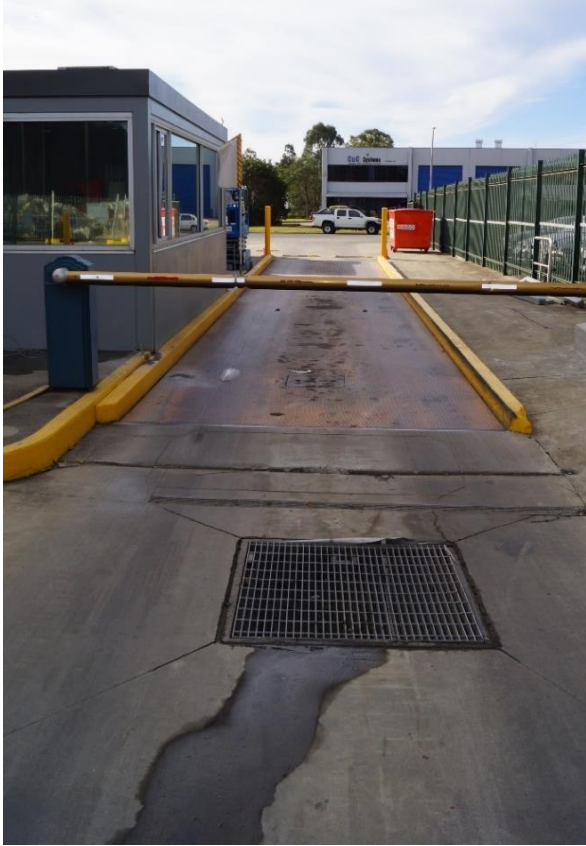


Plate 2: Entrance weighbridge



Plate 3: Western view from the subject site across Bow Bowing Creek



Plate 4: Eastern view down Pembury Road from the subject site



Plate 5: Western view down Pembury Road to the subject site



Plate 6: Southern view along western boundary adjacent to Bow Bowing Creek

The height of the proposed structures in the form of the electrical substation, office and amenities are much lower than the existing sheds. In this regard, there would be no discernible change to the height and scale of the development when compared to the current sheds. The proposal is consistent with the established built form and visual character of the area.

Existing landscaping in the form of shrubs over 2m in height, provides screening of the existing storage shed from the street. Landscaping is located along the northern boundary fronting Pembury Road. Existing landscaping would be retained and maintained for the duration of the construction programme.

In summary, the visual impacts associated with the proposal would be negligible on the basis that proposed works are small scale and are located behind existing landscaping.

6.3. Noise Impact

A Noise and Vibration Impact Assessment (NIA) Report has been prepared by SLR Consulting and is attached at **Appendix L**. This report assesses the potential impacts associated with noise and vibration outputs emanating from processing activities (operational noise), traffic and construction activities. The proposed hours of operation and nature of operations during the daytime, evening and night time (morning shoulder) period form part of the NIA. This also includes consideration of all plant and equipment nominated to support operations.

The proposed development has been assessed against the relevant criteria within the following documents:

- NSW Industrial Noise Policy (INP) – NSW EPA;
- Environmental Noise Management – Assessing Vibration: A Technical Guide – NSW EPA; and
- NSW Road Noise Policy (RNP) – NSW EPA.

6.3.1. Background Noise Environment

The surrounding area is characterised by a mix of industrial development, which due to the nature of operations and land use are not considered as sensitive in the way that other receivers such as an office, school or hospital would be. Hence, the NIA focusses on potential impacts on the nearest residential receivers. Notwithstanding this, the noise emissions from the operation of the facility to six surrounding community facilities and nearby industrial receivers also form part of the assessment.

The NIA identifies a total of five industrial receivers, six community receivers and 17 residential receivers. The locations of all receivers are illustrated in **Figure 17**.



Figure 17 Location of Sensitive Receivers

The background noise environment has been characterised by unattended noise monitoring utilising calibrated noise loggers and attended noise monitoring utilising calibrated sound level metres. Measurements were recorded and processed in accordance with the procedures contained in the INP and AS 1055.1-1997 “Acoustics – Description and measurement of environmental noise – General procedure.

The noise loggers measured the noise level over the sample period (27/11/2015 – 08/12/2015) to determine the following environmental noise levels:

- LA1 – The average sound power noise level exceeded for 1 percent of the monitoring period;
- LA10 – The average sound power noise level exceeded for 10 percent of the monitoring period;
- LA90 – The average sound power level that is exceeded for 90 percent of the monitoring period. This is considered representative of background noise;
- LAmax - The maximum average sound power level over the monitoring period; and
- LAeq – The equivalent continuous noise level.

The background level is established by determining the lowest tenth-percentile level of the LA90 noise data acquired over each of the day, evening and night time periods. The background noise level or rating background level (RBL) representing the day, evening and night time assessment periods is based on the median of the twenty six individual background levels determined over each period for the entire monitoring duration and is described as the ‘average minimum background sound level’.

In order to characterise the existing acoustical environment at the nearest sensitive receivers, operator attended noise measurements were conducted at Receiver R7 (37 Stromeferry Road) which was identified by SLR as the nearest residential receiver.

Ambient noise monitoring results for the locality are outlined in **Table 12** and **Table 13**.

Table 12: Measured Ambient Noise Levels Corresponding to INP Assessment Time Periods

Daytime ¹		Evening		Night-time	
RBL ²	LAeq ³	RBL	LAeq	RBL	LAeq
53	67	51	66	44	61

Note 1: For Monday to Saturday, Daytime 7:00 am - 6:00 pm; Evening 6:00 pm - 10:00 pm;

Night-time 10:00 pm - 7:00 am.

On Sundays and Public Holidays, Daytime 8:00 am - 6:00 pm; Evening 6:00 pm - 10:00 pm;

Night-time 10:00 pm - 8:00 am.

Note 2: The RBL noise level is representative of the “average minimum background sound level” (in the absence of the source under consideration), or simply the background level.

Note 3: The LAeq is essentially the “average sound level”. It is defined as the steady sound level that contains the same amount of acoustical energy as any given time-varying sound.

Table 13: Attended Noise Survey Results

Location	Date / Start Time	Primary Noise Descriptor			Typical Maximum Levels dBA and Vehicle Counts
		LAeq	LA1	LA90	
R7 - 37 Strome ferry Cres	27/11/2015 14:00 pm 15 Minute Measurement	68	74	57	Campbelltown Road traffic: 63-84 Urban traffic/Industrial hum: 53-55 Birds: 55-72

6.3.2. Operational Noise Assessment

The INP provides guidelines for the assessment of noise impacts associated with industrial activities. It aims to balance the need for industrial activity to take place with the desire for quiet within the community. The criteria selected are designed to protect at least 90 percent of the population living in the vicinity of the industrial noise sources for at least 90 percent of the time.

Compliance is achieved by ensuring:

- That noise from any single source does not intrude greatly above the prevailing background noise level. This is known as the intrusive noise criterion.
- The background noise level does not exceed the level appropriate for the particular locality and land use. This is known as the amenity criterion.

In order to satisfy the above two requirements, an amenity and an intrusive noise criterion is recommended of which generally the lower applies, noting the intrusive criteria applies to any 15 minute period and the amenity criteria applies to the noise 'averaged' over the relevant period of the day (i.e. day, evening and night).

6.3.3. Operational Noise Assessment Criterion

In setting an "Intrusive" noise goal, an estimate of the ambient (background) LA90 noise level, termed the Rating Background Level (RBL), needs to be established at the nearest sensitive receivers in the absence of the intruding source (i.e. the proposed development). An "RBL plus 5dBA" criterion is then applied to the 15-minute LAeq noise emissions of the noise source in question at the receivers of interest (normally at their property boundary).

The INP provides noise 'amenity' assessment guidelines that address existing and successive industrial development by setting acceptable (and maximum) cumulative LAeq(period) noise amenity levels for all industrial noise sources only (i.e. non-transport related) for a particular land use. It is noted that the INP does not set acceptable cumulative LAeq(15minute) intrusive criteria for all industrial noise sources, but rather seeks to control cumulative noise via the LAeq(period) noise amenity criterion.

The NIA defines the area type (e.g. urban) and considers the results of unattended noise monitoring to determine the project specific noise criteria. The intrusive and amenity criteria for residential premises and for industrial receivers at the property boundary are presented in **Table 14** and are used for the purpose of assessing potential operational noise impacts from the proposed development.

Table 14: Operational Noise Criteria for Nearest Receivers

Receiver	Time of Day	ANL ¹ LAeq (period)	Measured RBL ² LA90 (15minute)	Measured LAeq (period) Noise Level)	Criteria for New Sources		
					Intrusive LAeq (15minute)	Amenity ³ LAeq (period)	Sleep Disturbance Screening Criteria
Residential	Morning Shoulder ⁵ Period (6am-7am)		52	65	57	55	INP 67 RNP 60-65 ⁴ and 75-80 ⁵
	Day	60	53	67	58	60	-
	Evening	50	51	66	56	56	-
	Night	45	44	61	49	51	INP 59 RNP 60-65 ⁴ and 75-80 ⁵
Commercial	When in use	Acceptable 65 Maximum 70				65-70	
Industrial	When in use	Acceptable 70 Maximum 75	-	-	-	70-75	-

Note 1: ANL = "Acceptable Noise Level" for residences in Suburban areas, and acceptable and maximum noise level for industrial receivers in accordance with INP.

Note 2: RBL = "Rating Background Level".

Note 3: Assuming existing noise levels are unlikely to decrease in the future.

Note 4: Unlikely to awaken people.

Note 5: One or two noise events per night are not likely to affect health and wellbeing significantly.

Note 6: Shoulder Period defined as per Section 3.3 of the INP (i.e. 6:00am to 7:00pm).

It is noted that predicted levels are based on the potential worst case scenario based on all plant and equipment operating concurrently

6.3.4. Operational Noise Impact Assessment

Table 15 provides an overview of the noise sources to be generated on site combined with the time period and number of plant and equipment utilised within any particular period and forms the basis for determining the predicted operational noise levels at each of the identified receivers.

Table 15: Plant and Equipment Noise Levels

Noise Source or Activity	Sound Power level (dBA)		Equipment per 15 minute period			
	LAeq	LAmx	Morning Shoulder 6am-7am	Daytime 7am-6pm	Evening 6pm-10pm	Night-time 10pm-6am
Loaded Finger and Finlay Screen	112	123	1	1	1	Nil
External Enclosed Conveyor (30tph)	90	92	1	1	1	Nil
Forklifts	99	104	2	2	2	Nil
Wheeled Loader	108	115	1	1	1	Nil
Volvo L110F Excavator	103	110	1	1	1	Nil
Volvo EC140C Excavator	103	110	1	1	1	Nil
Liebherr LH22M Excavator	103	110	1	1	1	Nil
Industrial Sweeper	100	102	1	1	1	Nil
Trucks idling	100	103	4	4	4	Nil
Round trip truck entry, dump and exit	108	111	5	5	5	Nil

Note 1: The Finger and Finlay Screen would be wholly located within the shed.

The proposed 600 kw substation has an estimated sound power level of less than 90dBA. Consequently, SLR note that it will not contribute to the noise emissions from the Project.

The operational noise levels of the proposed facility at the seventeen nearest residential receivers, community receptors and industrial receptors are provided below.

Table 16: Predicted Operational Noise Levels (dBA)

Receiver	Period			Project Specific Noise Criteria		
	Morning Shoulder	Day	Evening	Night (Sleep Disturbance)	Morning shoulder/Day/Evening	Morning Shoulder/Night (Sleep Disturbance)
	L _{Aeq} (15minute)	L _{Aeq} (15minute)	L _{Aeq} (15minute)	L _{Amax}	L _{Aeq} (15minute)	L _{Amax}
Residential Receptor						
R1	30	30	30	39	57/58/56	67
R2	33	33	33	40	57/58/56	67
R3	29	29	29	37	57/58/56	67
R4	22	22	22	30	57/58/56	67
R5	28	28	28	37	57/58/56	67
R6	39	39	39	45	57/58/56	67
R7	46	46	46	52	57/58/56	67
R8	45	45	45	49	57/58/56	67
R9	39	39	39	43	57/58/56	67
R10	34	34	34	39	57/58/56	67
R11	29	29	29	35	57/58/56	67
R12	34	34	34	38	57/58/56	67
R13	33	33	33	41	57/58/56	67
R14	33	33	33	41	57/58/56	67
R15	35	35	35	43	57/58/56	67
R16	34	34	34	42	57/58/56	67
R17	29	29	29	41	57/58/56	67
Industrial Receptor						
I2	59 ¹	59 ¹	59 ¹	n/a	75 ²	n/a
I3	63 ¹	63 ¹	63 ¹	n/a	75 ²	n/a
I4	60 ¹	60 ¹	60 ¹	n/a	75 ²	n/a
I5	58 ¹	58 ¹	58 ¹	n/a	75 ²	n/a
Community Receptor						
C1	28 ¹	28 ¹	28 ¹	n/a	70 ²	n/a
C2	37 ¹	37 ¹	37 ¹	n/a	70 ²	n/a
C3	27 ¹	27 ¹	27 ¹	n/a	70 ²	n/a
C4	29 ¹	29 ¹	29 ¹	n/a	70 ²	n/a
C5	33 ¹	33 ¹	33 ¹	n/a	70 ²	n/a
C6	30 ¹	30 ¹	30 ¹	n/a	70 ²	n/a

Note 1: Predicted amenity noise levels for Industrial and Community Receptors.

Note 2: Amenity noise criteria - L_{Aeq}(period).

The operational noise impact assessment at **Table 16** indicates compliance with project specific noise criteria in accordance with the INP at all receivers during the daytime, evening, night time (morning shoulder) periods. Noise

generating activities associated with the proposed operations are therefore considered to have an insignificant impact on the existing noise environment.

6.3.5. Traffic Noise

The EPA's NSW Road Noise Policy (RNP) presents the NSW Government's noise design goals for the assessment of road traffic noise. The RNP presents recommended road traffic noise criteria for various types of road and land use development. The relevant criteria relating to land use development with the potential to create additional traffic on local roads is the LAeq(15hour) and LAeq(9hour), which is summarised in **Table 17**.

Table 17: Road Traffic Noise Assessment Criteria for Residences

Road category	Type of project/land use	Assessment criteria ¹	
		Day (7:00 am to 10:00 pm)	Night (10:00 pm to 7:00 am)
Freeway/arterial/sub-arterial roads	Existing residences affected by additional traffic on existing freeways/arterial/sub-arterial roads generated by land use developments	LAeq(15hour) 60 dBA	LAeq(9hour) 55 dBA
Local Roads	Existing residences affected by additional traffic on existing local roads generated by land use developments	LAeq(1hour) 55 dBA	LAeq(1hour) 50 dBA

Note 1: The criteria are for assessment against façade-corrected noise levels when measured at 1 m in front of a building facade.

The RNP notes that an increase of up to 2dB represents a minor impact that is considered barely perceptible to the average person. Where existing residences and other sensitive land uses are potentially affected by additional traffic on existing roads due to land use developments, any increase in the total traffic noise level should be limited to 2dB above the 'no build' option.

In determining the likely off site heavy vehicle noise emissions, consideration was given to the predicted increase in traffic movements on Campbelltown Road. This is detailed in **Table 18**.

Table 18: Predicted increase in vehicle movements^{1,6}

Road	Period	Existing ²			Project-generated (Proposed) ³			Cumulative			Increase due to Project		
		LV	HV	Total	LV	HV	Total	LV	HV	Total	LV	HV	Total
Campbelltown Road	Daytime ⁴	36,135	3,002	39,137	12	728	740	36,147	3,730	39,877	0.0%	24.3%	1.9%
	Night-time ⁵	6,601	703	7,304	12	48	60	6,613	751	7,364	0.2%	6.8%	0.8%

Note 1: Traffic flows are for two way traffic movements. To determine the number of vehicles accessing the Project Site divide Project-generated (Proposed) flow by 2.

Note 2: Existing traffic flow is based hourly annual average traffic flows from RMS's published AADT Traffic Volume Viewer database for [Station 83011](#) on Campbelltown Road for the period 24 October 2015 to 24 October 2016 (RMS AADT).

Note 3: Proposed traffic flows based on information presented in The Transport Planning Partnership Pty Ltd report *13Pembury Road, Minto Transport Impact Assessment* dated 24 November 2016 (TTPP Report).

Note 4: Average daily Monday to Saturday traffic flow for daytime period (7am to 10pm) from RMS AADT and TTPP Report. Divide by 15 to get average hourly daytime period traffic flow.

Note 5: Average daily Monday to Saturday traffic flow for night-time period (10pm to 7am) from RMS AADT and TTPP Report. Divide by 9 to get average hourly night-time period traffic flow.

Note 6: LV – number of light vehicles. HV – Number of heavy vehicles.

The maximum 24.3% (morning shoulder) and 1.9% (daytime) increase in total traffic flows, due to the Project related vehicles on Campbelltown Road, would result in less than a 2 dBA increase in the existing traffic noise levels. Specifically, the traffic noise levels would increase by 0.6 dBA and 0.2 dBA during the daytime and night-time periods, respectively. The noise increase of up to 2 dB represent a minor impact that is considered barely perceptible to the average person.

Where existing residences and other sensitive land uses are potentially affected by additional traffic on existing roads due to land use developments, any increase in the total traffic noise level should be limited to 2 dB above the corresponding 'no build option'. Accordingly, the NIA reasonably concludes that no project related traffic noise impacts are anticipated at residential receivers adjacent to the surrounding road network, including Campbelltown Road.

6.3.6. Construction Noise

The EPA's *Interim Construction Noise Guideline, 2009* (ICNG) provides a framework for the management of construction works associated with development. The ICNG recognises that higher levels of noise can be tolerated over the course of a construction program, when compared with longer term impacts associated with operational noise. Works proposed include concrete cutting for installation of weighbridge, associated services, amenities and office blocks over a period of approximately 30 days. It is proposed that works would be undertaken during the ICNG's preferred hours of construction being:

- Weekdays: 7:00am to 6:00pm
- Saturdays: 8:00am to 1:00pm
- Sundays and Public Holidays: No Construction

As outlined in the Construction Noise and Vibration Management Plan (**Appendix L**), the ICNG applies the LAeq (15minute criteria) when assessing noise levels arising from a construction project and is measured within the curtilage of an occupied noise – sensitive premises (i.e. at boundary or within 30 metres of the residence, whichever is the lesser). For construction works associated with the proposal, this level has been determined based on background noise monitoring and identifies receiver 'R7' (37 Stromeferry Crescent) as being the nearest occupied noise sensitive premises. Predicted levels are based on the potential worst case scenario based on all plant and equipment operating concurrently.

Predicted noise levels provided in the CNMP do not trigger the Noise Management Levels (NML) for residential premises at the nearest residential receivers and other land uses. The CNMP includes a monitoring program to assist in maintaining compliance while including management protocols to mitigate impacts and provide a framework for dealing with identified exceedances if this is to occur.

6.3.7. On site Heavy Vehicle Noise Emissions

Night-time (morning shoulder) noise emissions from truck activities and stacked heavy vehicles (idling) within the Project Site have been included in the onsite operational noise assessment and are accounted for in Section 6.3.3 of this submission, which confirms there would be no exceedance of the project specific noise criteria.

6.3.8. Operational Vibration

The Noise and Vibration Impact Assessment identifies, heavy material handling (trucks unloading) and the existing mechanical plant (in particular the Finger and Finlay Screens) as potential sources of vibration. The EPA's *Assessing Vibration: a technical guideline* provides values for continuous, transient and intermittent events that are based on a Vibration Dose Value (VDV) rather than a continuous vibration level. The VDV is dependent upon the level and duration of the short term vibration event, as well as the number of events occurring during the day time or night time period. The recommended VDV's for vibration of an intermittent nature are presented in **Table 19**.

Table 19: Acceptable VDV for Intermittent Vibration ($\text{m/s}^{1.75}$)

Location	Daytime ¹		Night-time ¹	
	Preferred value	Maximum value	Preferred value	Maximum value
Critical areas ²	0.10	0.20	0.10	0.20
Residences	0.20	0.40	0.13	0.26
Offices, schools, educational institutions and places of worship	0.40	0.80	0.40	0.80
Workshops	0.80	1.60	0.80	1.60

¹ Daytime is 7.00 am to 10.00 pm and night-time is 10.00 pm to 7.00 am.

² Examples include hospital operating theatres and precision laboratories where sensitive operations are occurring. These criteria are only indicative, and there may be a need to assess intermittent values against the continuous or impulsive criteria for critical areas.

Source: BS 6472-1992

The existing mechanical plant operating at the site are not anticipated to change, however, the plant would be audited and reviewed on an ongoing basis. The external vibration emissions and location of vibration generating plant and activities would be controlled so that the operation does not adversely impact upon neighbouring receivers and occupants within the proposed development. At this stage, no potential vibration sensitive receivers have been identified in close proximity to the project site. The NIA notes the following measures would be incorporated into operations to remove or mitigate vibration from these sources to reduce the likelihood of exceeding the relevant VDV criterion.

- **Heavy Material Handling**

Heavy materials are handled with grab tools on excavators that are able to handle individual concrete blocks and prevent dropping from height which may cause vibration which is not managed. Loading and unloading of bins is supervised and carried out by experienced drivers to limit potential impacts of bin placement when bins contain heavy materials.

- **Plant Vibration (Finger and Finlay Screen)**

The Finger and Finlay Screen located within sheds B and C has been identified as the primary potential source of vibratory concern. SLR undertook a broad spectrum (1Hz to 20kHz) noise and vibration survey of Finger and Finlay Screen currently in operation at a similar facility in Auburn, which is of a similar design as the one installed at the Minto facility. The survey found the screen to be operating in the dominant third octave band of 6.3Hz with overall rms (root mean square) vibration levels of 0.09 mm/s and 0.01 m/s^2 measured at 5m. The corresponding vibration dose being 0.17 $\text{m/s}^{1.75}$, which is significantly lower than the preferred vibration dose value of 0.8 $\text{m/s}^{1.75}$ for workshops associated with the neighbouring properties.

As a result of the above, the Noise and Vibration Impact Assessment notes that there will be no vibration impact to the surrounding industrial developments from the Project operation, particularly from the trucks and finger screen.

6.3.9. Noise and Vibration Mitigation and Management Measures

The NIA report indicates that there are no noise criteria exceedances in relation to the project specific noise criteria or resulting from traffic or construction related sources. A Noise Management Plan (NMP) would, however, be prepared if necessary to form part of a comprehensive OEMP should any exceedances arising from day to day operations occur.

This plan would be submitted to the Principal Certifying Authority (PCA) prior to the issue of a construction certificate under section 109C of the Act and to the EPA prior to variation of the EPL. The NMP would address matters such as:

- Limiting site hours of operation to 6:00am – 10:00pm Mondays to Saturdays;
- Implementation of a maximum vehicle speed limit of 5 km/hr would be imposed across all areas of the site;
- Limiting stacked trucks adjacent to the eastern property boundary to 17 vehicles at any one time;
- Requirements for on-going maintenance of fixed and mobile plant in accordance with manufacturers specifications;
- Maintaining a one truck limit at the western boundary weighbridge at a time;
- Development of protocols to ensure processing operations are undertaken wholly within Shed C;
- Vibration management – handling of heavy materials; and
- Implementation of monitoring and management measures contained in the Construction Noise and Vibration Management Plan for the duration of the construction programme.

6.4. Air Quality, Odour and Greenhouse Gas Emissions

An Air Quality Impact Assessment (AQIA) incorporating a Greenhouse Gas Assessment (GHGA) was undertaken for the Minto facility by SLR Consulting and is found at **Appendix M**. The proposed development has been assessed against the relevant criteria within the following documents:

- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC, 2005); and
- National Greenhouse Accounts Factors Workbook December 2014 Update (DoE, 2014).

6.4.1. Air Quality

The SLR Consulting AQIA includes consideration of background air quality, identifies sensitive receptors and considers airborne pollutants emanating from surrounding industrial sources. The key atmospheric pollutants likely to be generated by operational activities are fugitive emissions of particulates. The emission sources and pollutants identified under current operating arrangements are expected to be extended to the proposed development and include:

- Particulate emissions from loading/unloading of waste material;
- Particulate emissions from waste material handling/sorting/processing activities;
- Particulate emissions from onsite vehicle movements; and
- Particulate emissions from wind erosion from onsite stockpiles and exposed areas.

6.4.1.1. Particulate Emissions

Particulate (or dust) emissions are assessed in terms of total suspended particulate (TSP), and in terms of concentrations of particulate matter less than 10 µm and 2.5 µm in diameter (referred to as PM₁₀ and PM_{2.5} respectively).

The annual goal for TSP, as recommended by the NSW OEH, is 90 micrograms per cubic metre (Ng/m³) of air (µg/m³).

The NSW OEH PM₁₀ assessment goals set out in the Approved Methods are as follows:

- a 24-hour maximum of 50 µg/m³; and
- an annual average of 30 µg/m³.

It is noted that OEH guidelines do not set any assessment goals for PM_{2.5}, however a review undertaken by the National Environmental Protection Council (NEPC) concluded that there is sufficient community concern regarding PM_{2.5} to consider it independently of PM₁₀.

As such, in July 2003, a variation to the Ambient Air Quality NEPM was made to extend its coverage to PM_{2.5}, setting the following Interim Advisory Reporting Standards for PM_{2.5}:

- a 24-hour average concentration of 25 µg/m³; and
- an annual average concentration of 8 µg/m³.

It is noted that the advisory reporting standards relating to PM_{2.5} particles are interim guidelines only at the present time and are not intended to represent air quality criteria. Emissions associated with fuel combustion from delivery trucks and other fixed and mobile equipment at the site are anticipated to be minor. The emissions from fuel combustion were not modelled as part of this assessment, however measures to mitigate impacts and reduce emissions forms part of the recommendations contained in the impact assessment.

6.4.1.2. Odour Emissions

Odorous materials such as putrescible waste would not be accepted at the site and any hidden putrescible waste found on site would be stored in vermin-proof containers for lawful disposal off-site and has therefore not been modelled.

Similarly, any green waste found mixed within other waste streams would be appropriately separated and removed from site before decomposition begins to generate odour and thus has not been subject to further assessment or modelling.

6.4.1.3. Air Quality Goals

The air quality goals adopted for this assessment, which conform to current NSW and Commonwealth air quality criteria, are summarised in **Table 20**.

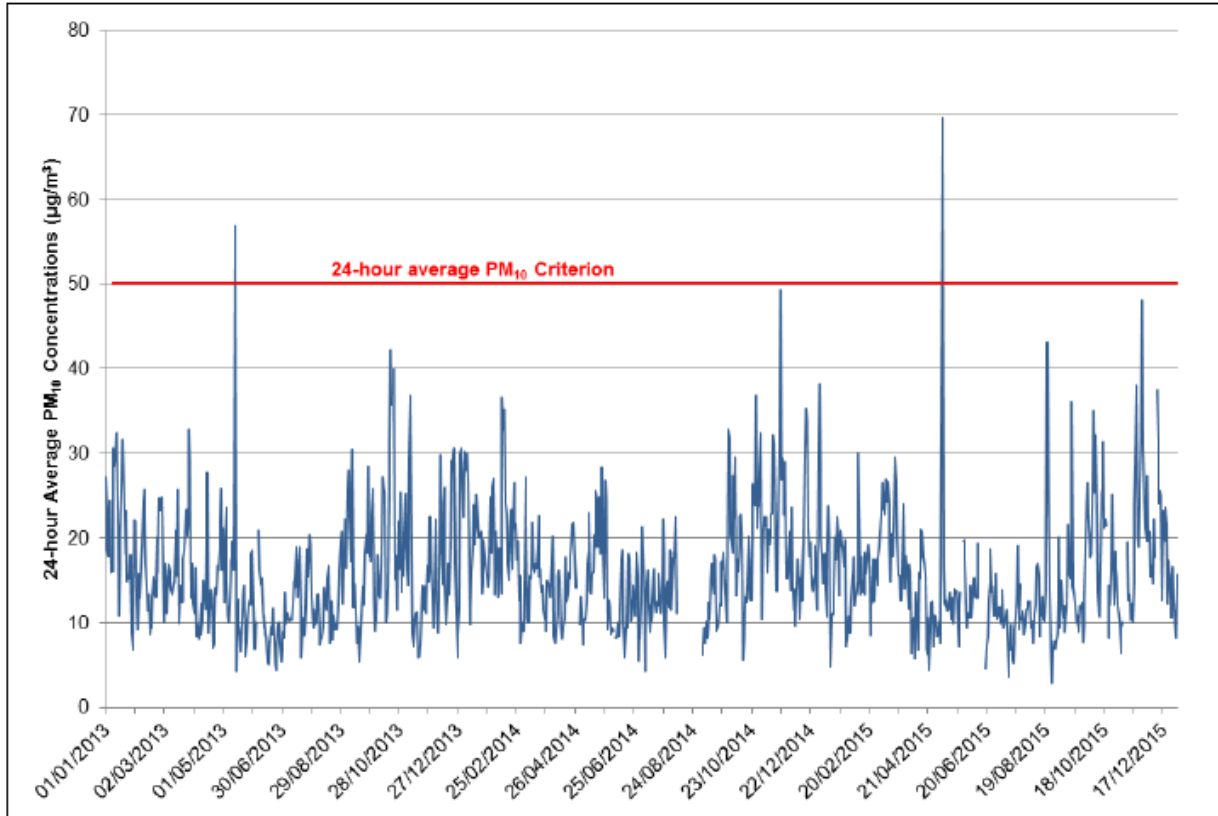
Table 20: Project Air Quality Goals

Pollutant	Averaging Time	Goal
TSP	Annual	90 $\mu\text{g}/\text{m}^3$
PM ₁₀	Maximum 24 Hours	50 $\mu\text{g}/\text{m}^3$
	Annual	25 $\mu\text{g}/\text{m}^3$
PM _{2.5}	Maximum 24 Hours	25 $\mu\text{g}/\text{m}^3$ (interim advisory reporting standard at the present time)
	Annual	8 $\mu\text{g}/\text{m}^3$ (interim advisory reporting standard at the present time)
Dust Deposition	Annual	Maximum incremental increase of 2 $\text{g}/\text{m}^2/\text{month}$
		Maximum cumulative of 4 $\text{g}/\text{m}^2/\text{month}$ (Project and other sources)

The adopted air assessment methodology is based on the modelling requirements contained in *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (DEC, 2005)*. This included running a dispersion model with three dimensional meteorological data for a full calendar year (365 days of hourly meteorological data, equivalent to 8,760 different meteorological conditions). Ground level particulate concentrations have been predicted for every hour of the year at each receptor point and the maximum predicted off-site 24 hour average particulate concentrations given by the modelling. These results therefore represent the concentrations associated with the worst case meteorological conditions within the modelled year (2014).

The monitoring data showed that the maximum 24 hour average PM10 concentrations recorded during 2013 were significantly higher than those recorded during 2014. A desktop review of publicly available information revealed that there were a number of bushfire and hazard reduction burning events in the surrounding area in 2013, which is likely to have resulted in the elevated concentrations recorded during this year. Similarly, the exceedance recorded in 2015 was due to a state-wide dust storm that originated from the Victorian Mallee and southern NSW region and travelled throughout NSW during 5 and 6 May (NSW OEH 2015).

Figure 18 24-Hour Average PM₁₀ Monitoring Results for Campbelltown West (2013 - 2015) (NSW OEH 2015)



Based on the information presented in **Figure 18** and in order to provide a contemporaneous analysis with the meteorological data file used in the dispersion modelling (2014 calendar year), monitoring data recorded by the Campbelltown West monitoring station during 2014 were used to estimate background PM₁₀ levels in this study.

The emission inventory used in this AQIA has been updated to represent a potential worst case scenario based on:

- The maximum daily processing capacity for emissions associated with processing activities; and
- The maximum anticipated daily on-site traffic movements for wheel-generated dust.

The worst case scenario assumes the following:

- A maximum daily processing capacity of 2,000 tonnes per day (i.e. 624,000 tonnes per annum);
- The maximum number of onsite traffic movements (776 trips/day) for transporting waste and product materials.

The dispersion model was run with three dimensional meteorological data for a full calendar year (365 days of hourly meteorological data, equivalent to 8,760 different meteorological conditions). Ground level particulate concentrations are predicted for every hour of the year at each receptor point and the maximum predicted off-site 24 hour average particulate concentrations given by the modelling are presented in Section 6.4.1.3. These results therefore represent the concentrations associated with the worst case meteorological conditions within the modelled year.

6.4.1.4. Sensitive Receptor Locations

The Approved Methods for the Modelling and Assessment of Air Pollutants in NSW defines a sensitive receptor as:

“a location where people are likely to work or reside; this may include a dwelling, school, hospital, office or public recreational area. An air quality impact assessment should also consider the location of known or likely future sensitive receptors.”

The industrial nature of the surrounding area means that such receivers would not be considered as sensitive in the way that an office, school or hospital would be, however the likely air quality impacts of the proposal on industrial receivers have nonetheless been assessed. Residential receptor 'R7' is identified in the AQIA as the sensitive receptor most likely to be affected by the proposal, due to its proximity to the site. The location of the receptors is illustrated in **Figure 19**.

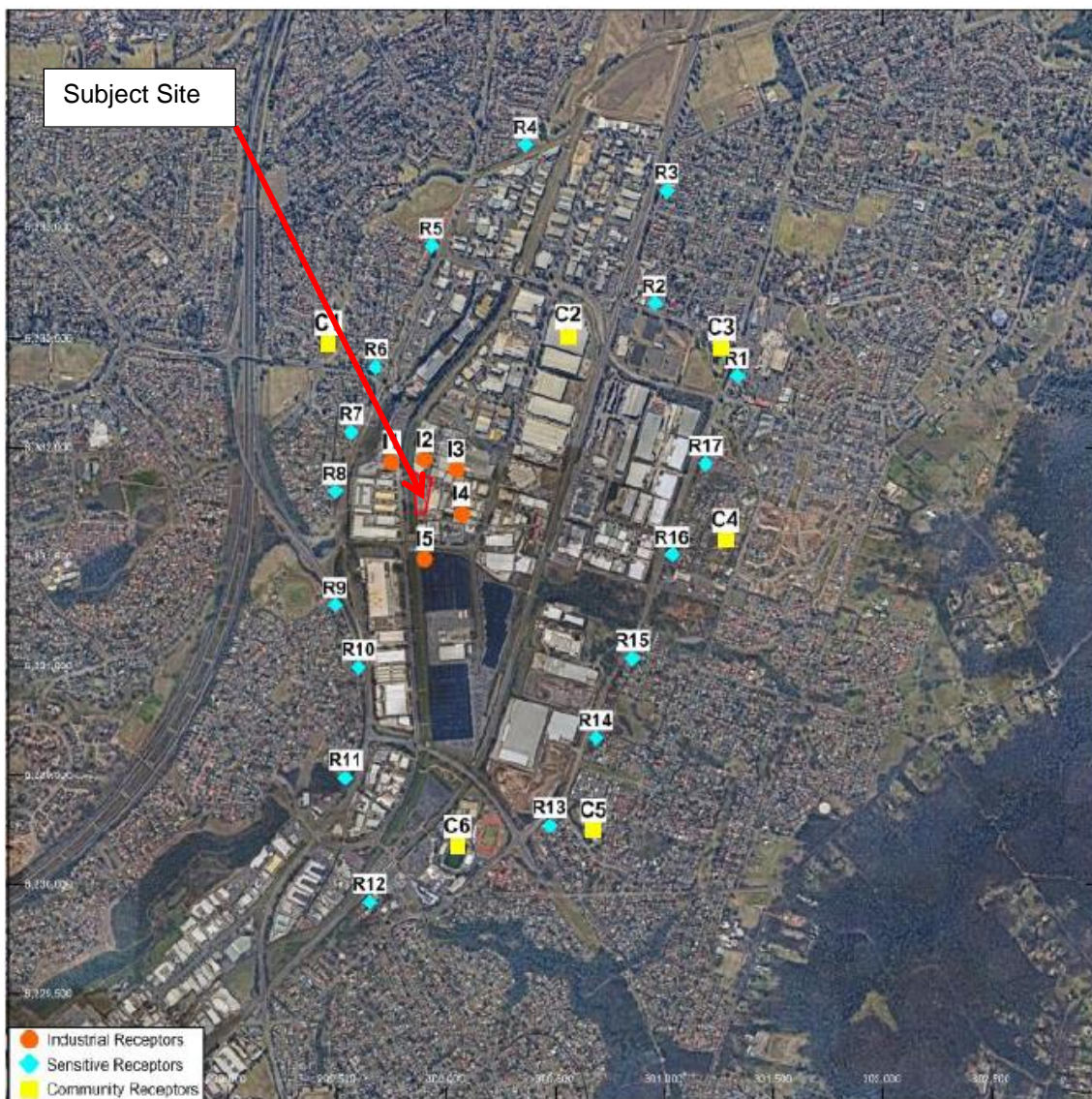


Figure 19 Location of Sensitive Receptors

6.4.1.5. Air Quality Impact Assessment

A summary of the modelling results of predicted concentrations for each pollutant for the sensitive receptors is provided below:

- Maximum 24-hour average cumulative (i.e. including background) PM_{2.5} concentrations predicted at surrounding sensitive receptor locations are below the relevant ambient air quality criterion of 25 µg/m³.
- Annual average cumulative PM_{2.5} concentrations predicted as a result of the proposed operation at surrounding sensitive receptor locations are also very low and well below the relevant ambient air quality criterion of 8 µg/m³.
- Maximum 24-hour average cumulative PM₁₀ concentrations predicted at surrounding sensitive receptor locations are below the relevant ambient air quality criterion of 50 µg/m³.
- Annual average cumulative PM₁₀ concentrations predicted as a result of the proposed operation are very low at all locations downwind and well below the relevant ambient air quality criterion of 25 µg/m³.
- Annual average cumulative dust deposition level predicted as a result of the proposed operation are also very low at all locations downwind and well below the relevant ambient air quality criterion of 4 g/m²/month.

The cumulative annual average PM₁₀ concentrations predicted at the industrial receptor locations comply with the relevant ambient air quality criterion of 25 µg/m³.

The results also show that the maximum predicted cumulative 24-hour average PM₁₀ concentrations comply with the ambient air quality criterion at all residential and industrial receptor locations.

The AQIA suggests that occupational exposure criteria for particulate matter (8 hour average concentrations) prescribed by Safe Work Australia (2012) would be a more relevant criteria to apply to industrial receivers due to the fact that:

- As places of work, people would not be expected to be present at these locations for 24-hours per day; and
- The people present in these work places would not be expected to include the very young or elderly, which the ambient air quality criteria have been developed to protect.

Under this scenario, the predicted incremental concentrations are less than 1% of the Safe Work Australia (2012) guideline, and it can be concluded there would be no potential for exceedances of the occupational exposure guideline for respirable dust at the surrounding industrial receptors.

6.4.2. Mitigation and Management Measures.

To reduce the likelihood of exceedances emanating from the proposed facility, an Air Quality Management Plan (AQMP) would be prepared to form part of a comprehensive OEMP. This plan would be submitted to the Principal Certifying Authority (PCA) prior to the issue of a certificate under section 109C of the Act. The OEMP would also be submitted to the EPA for review prior to the variation of the EPL. The AQMP would address matters such as:

- The regular maintenance of an operator-activated overhead dust suppression system (Cool Mist);
- Use of a street sweeper over external hardstand areas;
- Development of protocols to ensure waste stored externally (except waste awaiting loading onto vehicles) is contained within bins and bays;
- Use of hand held hoses to supplement overhead dust suppression system and sprinklers;
- Use of hand held hoses within any areas not covered by the overhead dust suppression system and sprinklers;
- Procedures to cease operations if weather conditions have a major negative impact on the operation;
- Implementation of a maximum vehicle speed limit of 5 km/hr would be imposed across all areas of the site;
- Procedure to check all vehicles are checked for soil on tyres prior to leaving site and where soil is detected on the entrance road (i.e. “track out”), staff would be deployed to sweep the road;
- Maintenance requirements for all on-site, fixed and mobile diesel powered plant (excluding road vehicles) (e.g. manufactures specifications);
- Use of wheelwash at the exit weighbridge ensuring trucks would remain covered until waste removal (unloading);
- Installation of a wind anemometer on site to monitor wind strength and direction;
- Maintenance requirements of wheelwash and stormwater pits to prevent build up of dust / sediment;
- Assignment of roles and responsibilities for staff to manage air quality issues such as dust suppression, and outlining the mitigation measures to be implemented to minimise the generation of air pollutants; and
- Procedures to handle potentially odour generating wastes such as green waste or hidden putrescible wastes.

6.4.3. Greenhouse Gases

A greenhouse gas (GHG) assessment forms part of the SLR AQIA and includes:

- A quantitative assessment of the direct (Scope 1) and indirect (Scope 2 and 3) greenhouse gas emissions of the development, and a qualitative assessment of the potential impacts of these emissions on the environment; and
- A detailed description of the measures that would be implemented on site to ensure that the development is energy efficient.

The emission sources identified for the proposed development are outlined in **Table 21**. Rates of consumption are predicted based on an assessment of known consumption from current operations.

Table 21: Scope 1, 2 and 2 Emission Sources and Predicted Consumption

Scope	Activity	Source	Consumption
Scope 1	Facility operations	Consumption of diesel for stationary energy purposes ¹	182 020 litres per annum
Scope 2	Facility operations	Consumption of purchased electricity ¹	122,325 kWh per annum
Scope 3	Transport of recyclables to and from facility Transport of residual waste material to landfill	Consumption of diesel for transport energy purposes ¹	266,500 litres per annum

Note 1 Stationary purposes include machinery and vehicles which by law cannot drive on the road or are not typically road-registered. Transport purposes include machinery and vehicles which by law can drive on the road.

The consumption rates of emission sources is calculated as emission sources in **Table 22**.

Table 22: Annual Project GHG Emissions – Proposed Operations

	Quantity	Unit	Emissions (t CO ₂ -e / yr)
Scope 1			
Stationary Diesel	182.08	kL	488
Scope 2			
Electricity	122,325	kWh	105
Scope 3			
Transport Diesel	266.5	kL	719
Total			1,313

The total estimated annual operational GHG emissions for the Project are 1313 tCO₂-e per year. The NSW Office of Environment and Heritage (OEH) has published the NSW state emissions profile for 2010 as 157 million t CO₂-e. Therefore, in the context of the State of NSW, the development would represent approximately 0.0009% of the total NSW emissions, which is considered to be a negligible contribution.

Scope 1 emissions represent 37% of predicted emissions generated from the facility and thus targeted measures to ensure the most efficient operation of stationary plant and equipment and along with the operator's fleet of vehicles has potential to reduce consumption of diesel.

6.4.4. Mitigation and Management Measures

The following mitigation and management measures would be implemented at the site to minimise greenhouse gas emissions during operations:

- Energy efficiency options relating to mobile plant and equipment would minimise GHG emissions attributable to the site operations. The use of diesel fuel can be minimised through good engine maintenance practices as listed above for local air quality and by reducing idling times of trucks. Fixed plant maintenance requirements and practices would be incorporated into the OEMP to ensure all plant is operating in an efficient manner.

- Use of energy-efficient lighting and energy-efficient appliances in the site office spaces. Prior to the release of a Construction Certificate issued pursuant to Section 109C of the EP & A Act, a report addressing the energy efficiency requirements contained in Section J of the National Construction Code (BCA) would be prepared and submitted to the appointed Principal Certifying Authority. This report would document and assess the suitability of lighting and appliances proposed for the site office space.
- Garden waste materials received on site (i.e. low volumes contained in skip bins from household clean up or demolition sites) are picked and stored separately, then transported off site to a local facility for recycling (i.e. mulched, chipped and/or composted). The diversion of organic residues from landfill prevents the emission of greenhouse gases in the order of 900 - 1,300 kg CO₂ - equivalents per tonne of garden or food organics landfilled (Compost Victoria, 2010). The final OEMP would include details relating to the identification, handling and diversion of green waste.

6.5. Hazard Assessment

A preliminary risk screening assessment of the proposed storage quantities and delivery frequencies of dangerous goods proposed to be used on site was undertaken by SLR Consulting and can be found at **Appendix K**.

6.5.1. Dangerous Goods Storage

The proposed inventory of Dangerous Goods (DG) in accordance with the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) is provided in **Table 23** below.

The information contained in the table compares the total storage quantity of the required dangerous goods classes against the storage screening threshold in **Table 23**.

The dangerous goods stored on the site were grouped into their respective ADG classes. If more than one packaging group was present in an ADG class, it was assumed that the total amount for that class was the more hazardous packing group.

Table 23: Dangerous Goods Classes in Storage

Substance	Hazardous Class	Packing Group	Total Storage on Site	Threshold Quantity	SEPP 33 Threshold Level Findings
Diesel	Not applicable		30,000 litres	Not applicable	Not applicable

Diesel is a class C1 combustible liquid and, as described in Applying SEPP 33, is not considered to be potentially hazardous when stored in a separate bund or within a storage area where it is the only combustible liquid present.

As outlined on the Burgess, Arnott & Grava stormwater concept plan, the diesel storage tank area and bund is designed and constructed to satisfy the requirements of *AS1940-2004 - The storage and handling of flammable and combustible liquids*. This standard contains the minimum acceptable safety requirements for storage facilities, operating procedures, emergency planning and fire protection.

The dangerous goods stored on site are below the screening thresholds and therefore not considered to be potentially hazardous.

6.5.2. Transportation of Dangerous Goods

In applying SEPP 33 a proposed development may be deemed potentially hazardous if the number of generated traffic movements for significant quantities of dangerous goods entering and leaving the site are above the cumulative vehicle movements shown in Table 2 of the SEPP 33 guideline.

Diesel is not classified as a dangerous good for the purposes of transport however for reporting purposes vehicle movements would be ≤ 1 per week. On this basis, no specific restrictions or mitigating measures are required with respect to the transportation of dangerous goods to and from the site.

The SLR preliminary risk screening and hazard assessment concluded that the Minto facility would not be classified as a hazardous or offensive industry due to the lack of dangerous goods stored on or transported to the site.

6.5.3. Mitigation and Management Measures

To ensure the risks associated with the storage of potentially dangerous goods are not increased, the following measures are proposed:

- Storage of diesel fuel would be limited to the quantities contained in this EIS and the SLR Preliminary Hazard Assessment;
- Diesel fuel is stored within a bunded area with sufficient capacity and is in isolation of any other flammable liquids, dangerous goods and / or hazardous chemicals;
- The diesel storage tank area and bund is designed and constructed to satisfy the requirements of *AS1940-2004 - The storage and handling of flammable and combustible liquids*; and
- Diesel use and storage are incorporated into the OEMP.

6.6. Waste Management

6.6.1. Construction Waste Management

A Construction Waste Management Plan was prepared by Dewcape Pty Ltd which identified construction waste to comprise materials typically associated with minor demolition and construction works (**Figure 20**) to include:

- New third weighbridge;
- Amenities block;
- Car Parking Spaces;
- Relocate existing 30,000 litre fuel tank;
- Construct concrete slab for 7 additional parking spaces;
- Site shed office;
- Electrical substation; and
- Inground wheelwash

The proposed works would occur in a single stage. The total project on-site period is estimated to be approximately 6 weeks.

The desired outcome of a successful waste management policy is as follows:

- Most of the material as generated from the works is recycled, reused, or repurposed;
- The net results would be the minimisation of the landfill contribution and less reliant on the consumption of new material;
- Removal and disposal of waste in compliance with Protection of the Environment Operations Act 1997, and
- The Waste Avoidance and Resource Recovery Act 2001.

The typical working hours for construction as allowed by the council is:

- Monday to Friday: 7:00 am to 5:00 pm
- Saturday: 7:00am to 1:00pm
- Sunday: no work

It is anticipated that the number of workers during the demolition and construction of the proposed development to be a range of 25 - 35 persons during construction period.

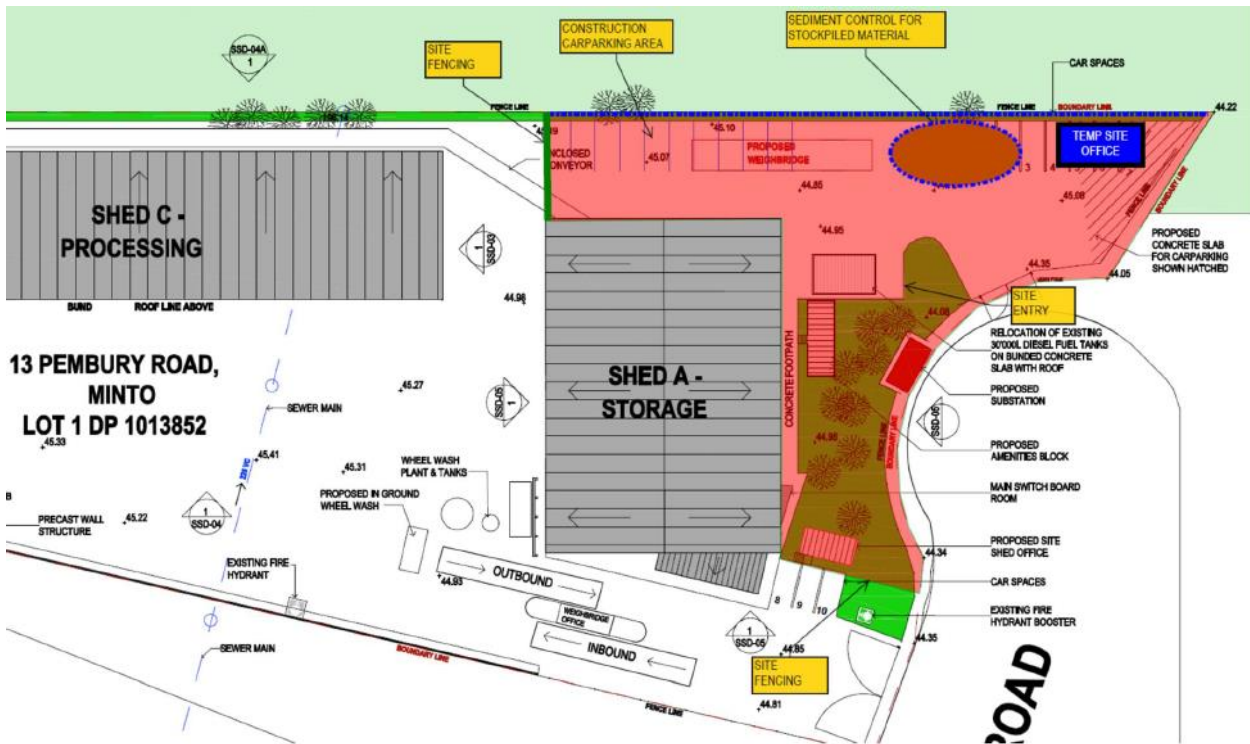


Figure 20 Site Management Plan

Source: Dewcape Pty Ltd

6.6.2. Operational Waste Management

A final Operations Environmental Management Plan (OEMP) would be adopted to oversee the day to day site operations. The OEMP would include protocols and procedures relating to:

- Waste acceptance;
 - Waste source control;
 - On site storage requirements;
 - Resource recovery requirements;
 - Green waste management;
 - Operational noise management;
 - Dust and air quality management;
 - Management and maintenance of stormwater infrastructure;
 - Transport and Disposal (Waste Tracking);
 - Stockpile Management;
 - Special Waste Management (Asbestos and Tyres);
 - Third party material sampling; and
 - Weighbridge operation (including calibration).
- With regard to waste management the OEMP will be prepared with regard to the relevant requirements derived from the following guidelines and legislation:
- NSW EPA Waste Classification Guidelines;
 - NSW EPA Waste Levy Guidelines;
 - POEO Act;
 - POEO (Waste) Regulation;
 - POEO (General) Regulation;
 - Resource Recovery Order and Exemption (RRO&E) for Recovered Fines;
 - Work Health and Safety Regulation 2011; and
 - NSW EPA Draft Protocol for Managing Asbestos During Resource Recovery of Construction and Demolition Waste

The OEMP is reviewed and amended at least annually. It is expected that the revised OEMP would incorporate any additional measures relating to waste handling and management resulting from the assessment of this application.

A project specific OEMP would be reviewed by the EPA prior to the EPL being varied and prior to the commencement of operations or the release of an occupation certificate under Section 109C of the Act.

Once operational, it is a requirement of *ISO 14001 Environmental Management Systems* that the management plan is reviewed at least annually or as changes occur to operations, risks are reviewed or recommendations are made as a result of an audit.

A project specific OEMP representative of the conditions of approval and identified risks would nominate all relevant mitigation, management, control measures and procedures to eliminate or minimise risks where possible. Relevant procedures for each section of the OEMP are referenced in the OEMP as they are part of the business operations ISO14001, 9001 and 4801 (SEQ) management systems.

The site operator has an established compliance team that would manage and maintain the SEQ Management Systems documentation which includes the OEMP, policies and procedures relevant to site operations at Minto. All policies, procedures and other system documents are maintained, reviewed and updated in accordance with the Management System.

6.6.3. Soil and Water Management

The proposed stormwater management plan for the site is provided in **Appendix I**. This plan, prepared by consulting engineers Burgess Arnott Grava details the proposed measures as part of an overall water cycle management strategy:

- Use of the existing Stormwater 360 unit;
- Use of 100KL underground rainwater tank and associated roof drainage to collect runoff from the roofed area;
- Installation of a watertight pit lid to the stormwater pit downstream of the existing Stormwater 360 filter;
- Use of bunds for the purpose of retaining runoff;
- Installation of gate valve on existing stormwater pipe for use when blocking fire water runoff; and
- Bunding works associated with the on-site 30,000L fuel tank.

In addition to the proposed stormwater measures described above, Ecosol Litter Baskets with 200µm filter bags would be retrofitted into all drainage pits onsite replacing standard inlet screens on retained pits. Proprietary litter baskets are proposed to provide better pollutant capture and retention performance when compared to standard pits. Existing leachate collection sumps within the processing shed capture any runoff generated within this building. The leachate collection sumps would prevent any possible leachate generated from flowing onto external hardstand areas and entering the external stormwater management system.

Stormwater would be piped through a propriety stormwater treatment device (Stormwater 360 Stormfilter) prior to discharge from the site. The vortex separator provides treatment through removal of sediment, hydrocarbon (free oil) and sediment bound heavy metals. SLR consider the site to be highly impervious which, when combined with minimal vegetation and processing of waste within an undercover environment, limited nutrients or oxygen demanding materials are expected to be generated.

6.6.4. Quantitative Assessment (MUSIC Model)

The Burgess Arnott Grava stormwater concept plan has been prepared with regard to, and subsequently assessed against the water quality objectives contained in the SLR Soil and Water Assessment Report.

This report details the outcome of a quantitative assessment utilising the *NSW MUSIC Modelling Guidelines*. The quantitative assessment has been undertaken to consider stormwater runoff yields and pollutant load rates of the existing system and predicted performance of the proposed stormwater management measures to determine the likely impacts of site operations in the context of the wider catchment.

The MUSIC model draws on inputs from the following:

- Catchment areas and parameters including percentage impervious and pollutant generation rates – adopted based upon Burgess Arnott Grava Stormwater Concept Plan (**Appendix F**) and the industrial land use and roof values specified within the NSW MUSIC Modelling Guidelines;
- Meteorological data for Sydney in accordance with NSW MUSIC Modelling Guidelines; and
- Where applicable, information supplied by the manufacturers.

The MUSIC model draws on such inputs to generate predicted pollutant loads and concentrations for Gross Pollutants (GP), Total Suspended Solids (TSS), Total Phosphorus (TP), and Total Nitrogen (TN).

6.6.5. MUSIC Modelling Results

The model predicts that the mean annual runoff volume generated for the site will be 6.45 ML/yr. The proposed 100kL rainwater tank is expected to reduce mean annual runoff volumes by approximately 0.71 ML/yr. The predicted performance of the existing and proposed stormwater management system is outlined in **Table 24**.

Table 24: Pollutant Load Modelling Results

Parameter	Predicted Pollutant Removal Rate %		
	Target	Proposed Stormwater Management	Targets achieved
Total Suspended Solids (kg/yr)	80	80.4	Yes
Total Phosphorous (kg/yr)	45	67.1	Yes
Total Nitrogen (kg/yr)	45	51.1	Yes
Gross Pollutants (kg/yr)	NA	100	Yes

The modelling indicates that the proposed treatment system will meet Council's objectives for gross pollutants, TSS, TP and TN for the proposed development.

The combination of the litter baskets, rainwater tank and the existing vortex separator will:

- Improve the quality of stormwater being discharged from the site;
- provide adequate treatment in terms of reducing the key pollutants (i.e. gross pollutants, coarse sediment, suspended solids and free oils); but
- provide limited yet sufficient treatment of other pollutants such as heavy metals and nutrients.

6.6.6. Erosion and Sediment Control

As the predicted peak flow rates and runoff volumes will be slightly reduced when compared to existing rates and volumes, the proposed development is not expected to result in increased erosion impacts in downstream waterways since there is no change to site levels as previously approved and conditioned by Council. During on-site construction works, erosion and sediment control will be established and maintained (**Appendix I**).

6.6.7. Flooding

As detailed in **Section 2** of this EIS, the site is potentially affected by main stream flooding. However, as only minimal changes to the impervious surface area are proposed and stormwater discharge points will be maintained, the proposed development is not predicted to increase local overland flooding or increase peak flow rates to the established stormwater network. Existing ground levels remain unchanged as a result of the minor building works on the site. Also, since any increase in flood peak flow rates and volumes would be negligible as a result of the proposed development, the proposed development is unlikely to cause any flooding impacts onsite or to neighbouring or downstream properties.

6.6.8. Runoff and Leachate Management

As outlined in **Section 6.7.2**, peak flow rates and runoff volumes from the subject site will not be increased as a result of the proposed development. The existing “Coolmist” fogging system is designed to produce a fine mist within the shed which will not produce runoff. In addition, the yard sprinklers would only be used for dust suppression purposes to make the ground damp but not wet enough to produce surface water runoff and thus would not contribute to predicted runoff volumes.

In the event that runoff is generated within the shed, it will drain to dedicated leachate sumps (blind pits), which would prevent leachate entering the stormwater management system or migrating to external hardstand areas and mixing with rainfall. Sheds are bunded and have high points at the entrance points to prevent any runoff from entering the sheds.

6.6.10. Soil and Water Management Conclusions

The Soil and Water assessment indicates that the Project and associated current and proposed management measures will adequately control impacts related to:

- Soil contamination;
- Groundwater;
- Stormwater runoff peak flow rates and volumes;
- Stormwater quality;
- Flooding; and
- Firewater

It is considered that the proposed control measures to be implemented onsite will adequately manage pollutant loading to the stormwater drainage network in relation to the key pollutants of concern including gross pollutants, coarse sediment, suspended solids and free oils. This will be verified by ongoing monitoring and further mitigation measures employed as required.

Given the size of the Site in the context of the catchment, any elevated stormwater pollutant load discharges are unlikely to pose a significant impact to the health of ecosystems within the Georges River Catchment and other downstream waterways.

6.6.11. Management and Mitigation Measures

To ensure the proposed facility does not result in a reduction in the quality of stormwater leaving the site, a Water Cycle Management Plan (WCMP) would be prepared to form part of a comprehensive OEMP. This plan would be submitted to the Principal Certifying Authority (PCA) prior to the issue of a certificate under section 109C of the Act. The OEMP would address:

- Existing control measures for:
 - Stormwater 360 Stormfilter;
 - Litter baskets;
 - Rainwater tank;
 - Sweeping of internal and external hardstand areas;
 - Cleaning and removal of leachate from blind sumps with the use of a tanker; and
 - fogging system;
- Procedures to ensure all waste (except waste awaiting loading onto vehicles) is stored in an enclosed environment.
- Procedure to check all vehicles are checked for soil on tyres prior to leaving site and where soil is detected on the entrance road (i.e. “track out”), staff would be deployed to sweep the road.

In addition to the development of the WCMP as part of the OEMP, the following mitigation measures are proposed:

- To reduce demand on potable water the rainwater tank shall be connected to on site amenities and used for landscaping prior to the release of an occupation certificate issued under Section 109C of the EP&A Act and;
- The existing fuel store area and waste storage bays are covered and bunded as detailed on the Burgess Arnott Grava Stormwater Concept Plan. The bund area is sized to ensure there is sufficient area to accommodate a fuel spill and any leachate generated.

6.7. Contamination

A 'Phase 1' Contaminated Land Investigation has been prepared by SLR Consulting and a copy is found at **Appendix J**. This report identifies areas of environmental concern (AEC) and associated contaminants of potential concern (COPC) at the site and provides recommendations for further investigation.

The SLR report notes that the subject site is suitable for continued use for industrial purposes, however recommends that additional investigations in the form of soil sampling be undertaken in areas where future soil disturbance is proposed. During construction, the existing site levels will be retained and any ground disturbance will be minimal and limited to excavation for footings only. It is unlikely that groundwater will be affected at the depths proposed for footings. There is negligible if any risk of coming into contact with groundwater let alone contamination of groundwater from activities associated with construction of footings as the new structures are demountable and do not require significant excavation.

All operations would be conducted on sealed surfaces resulting in minimal impacts to on-site soil and groundwater contamination. An updated Construction Waste Management Plan (CWMP) would include protocols relating to the supervision, testing and handling of groundwater in the unlikely event that it is encountered during construction works.

6.7.1. Management and Mitigation Measures

A Construction Environmental Management Plan (CEMP) would be prepared and submitted to the PCA prior to the commencement of demolition works or the approval of a construction certificate under section 109C of the Act.

The CEMP would further consider the results of subsurface materials testing and would provide protocols to ensure the health and safety of construction workers when handling or working within disturbed areas. Any testing of material would be undertaken in accordance with the relevant guidelines made under the *Contaminated Lands Management Act 1997*. Should further approvals be required to undertake construction or remediation work, they would be sought and secured prior to the commencement of any works.

An updated Pollution Incident Response Management Plan (PIRMP) would assess the risk of contamination resulting from activities associated with the proposal. The updated PIRMP would be submitted to the NSW EPA as part of any application to modify the EPL for the site.

6.7.2. Access, Traffic and Parking

The Transport Impact Assessment (TIA) prepared by The Transport Planning Partnership (TTPP) (**Appendix G**) considers the existing and proposed traffic generating characteristics of the site to estimate traffic generation rates along with the proposed change in hours of operation. Importantly, this report considers the predicted mix of heavy vehicles which would transport waste product to and from the site. Analysis of these elements against the capacity of the established road network allows for the likely impacts of the proposed operations to be determined. This assessment report also considers the likely construction traffic impacts associated with the proposal.

6.7.3. Traffic Generating Characteristics

The TIA provides breakdown of the proposed heavy vehicle movements from the development. This breakdown shows that the site has capacity to generate a maximum of 464 heavy vehicle movements per day (two way) which means that in the unlikely event that the site would operate to its fullest capacity, a maximum of 232 trucks would use the site.

The distribution, or directional split of traffic generated is such that all waste is carried into the site (inbound) on a truck that would leave empty. Recovered (or processed) waste is transported out of the site (outbound) by vehicles that arrive at the site empty. In practice, trucks entering the site with waste may also leave the site with recovered materials.

The existing facility generates approximately 88 (two way) vehicle movements per day, processing 30,000 tonnes of waste per annum. While the proposal represents an increase of 7.3 times in volume of waste processed, this would not result in a proportional increase in heavy vehicle movements. This is primarily due to the change in the type (size) of heavy vehicles predicted to transport waste to, and processed waste from, the site. The increase in capacity is predicted to result in larger heavy vehicles utilising the facility. Hence, there would be fewer vehicle movements carrying more material.

Based on current weighbridge data, existing vehicle movements carry an average of 5 tonnes per load. **Table 25** below shows the proposed breakdown of heavy vehicle movements and helps to demonstrate, and as also considered in **Section 6.1** of this EIS, that the proposed movements will not simply be based on the same calculation as the existing vehicle movements but, rather more dense waste material to be transported which correlates to larger vehicles, hence fewer vehicle movements.

Applying this ratio to the annual vehicle trips would result in 200,429 vehicle movements per year which is greater than the estimated number of trips (i.e. 144,750) as shown in **Table 25**. This demonstrates that the traffic generated by the future development is not directly proportional to the increase in waste throughput; rather, it correlates to the proportion of vehicle types which are transporting the waste.

Table 25: Future Vehicle Movement based on vehicle size

Breakdown Vehicle type based on weight	Proportion of vehicles %	Proportion of waste	Waste per annum (tonnes)	One-way movements per annum
Inbound Waste				
<5 tonnes	21.2%	3.0%	6,598	13,466
5 – 12.5 tonnes	46.8%	46.3%	100,616	29,680
12.5 – 15 tonnes	18.2%	24.4%	55,624	12,092
>15 tonnes	13.9%	26.3%	57,162	8,794
Subtotal	100%	100%	220,000	64,033
Outbound Waste				
<5 tonnes	0%	0%	0	0
5 – 12.5 tonnes	0%	0%	0	0
12.5 – 15 tonnes	3.3%	0.5%	1,030	278
>15 tonnes	96.7%	99.5%	208,380	8,064
Subtotal	100%	100%	209,410	8,342
Total (one-way movements)			72,375	
Total (two-way movements)			144,750	

6.7.4. Operational Traffic Impact

6.7.4.1. Road Network

The TIA shows that existing traffic volumes within Pembury Road are acceptable having regard to the function and purpose of the network. As Pembury Road does not cater for through traffic, movements are limited to vehicles accessing businesses along Pembury Road only. As surveyed, Pembury Road carries moderate traffic volumes with approximately 75 eastbound and 98 westbound during the AM and 87 eastbound and 105 westbound during PM peak periods respectively.

The TIA notes that the operational capacity of a two way undivided road (such as Pembury Road) can be as high as 900 vehicles per hour per lane, indicating spare capacity in the network. Similarly, the intersections most likely to be used by vehicles associated with the development were assessed as having either a 'B', 'C' or 'D' level of service, indicating that they currently operate satisfactorily.

Peak usage periods were assessed with the AM peak understood to occur between 8:00 and 9:00am with the PM peak between 1-2pm weekdays. The peak period for the existing facility is between 9-10am and 12-1pm and predicted to remain the same for the proposed operations. This is reflected in **Figure 21** which provides an overview of the existing and projected vehicle movements per hour overlaid with the road network peaks.

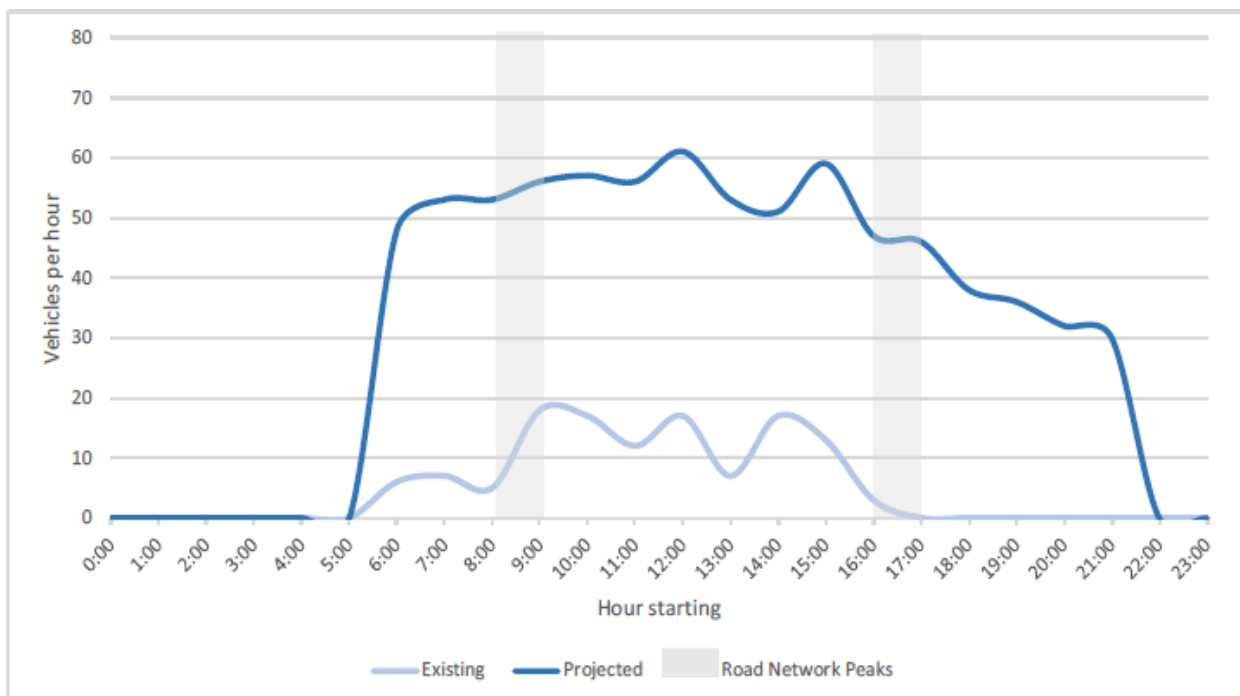


Figure 21 Daily Traffic Profiles

Source TTPP Transport Impact Assessment 2017

As detailed in **Figure 21** the proposed extension of operating hours would allow for a greater distribution of traffic volumes over a longer period. This is predicted to ‘flatten’ peak vehicle activity and would spread vehicle movements outside of the current road network peak periods.

The TIA concludes that the additional traffic generated by the proposal, could not be expected to compromise the safety or function of the surrounding road network, and thus the operation of the surrounding road network would largely remain unchanged as a result of the proposal. Also, a comparison (**Table 26**) of the existing and future intersection operating conditions shows that the impact of traffic generated by the development would not result in a significant change to the existing intersection Level of Service for the intersections of Campbelltown Road with Ben Lomond Road and Rose Payten Drive. Hence, as a worst-case scenario, nearby intersections would operate at an acceptable level of service during both AM and PM peak periods.

Table 26: Intersection Level of Service

Intersection	Intersection Type	AM Peak Period			PM Peak Period		
		Average Delay(s)	Level of Service (LoS)	Current LoS	Average Delay(s)	LoS	Current LoS
Campbelltown Road / Ben Lomond Road	Signals	54	D	D	39	C	C
Campbelltown Road / Rose Payten Drive	Signals	26	B	B	24	B	B

The TTPP Transport Impact Assessment concludes that the proposal would not warrant any upgrades to existing road infrastructure within the vicinity of the site.

6.7.4.2. Car Parking and Pedestrian Safety

The State Environmental Planning Policy (State and Regional Development) 2011, Part 2, Clause 11 stipulates that council development control plans do not apply to state significant developments. However, having due regard to the objectives and guidelines as set by Council for industrial developments, the provision for car parking of the proposed development has been reviewed in accordance with the Campbelltown (Sustainable City) Development Control Plan (DCP) 2015 as well as undertaking an assessment of the actual operation of the proposal.

Under the DCP, the minimum required onsite car parking spaces would be 40 spaces.

For the proposed 13 full time employees at the site, 40 parking spaces is considered to be excessive, particularly since the maximum number of staff onsite at any one time is 13 people. In this instance, determination of the required parking is considered more appropriately measured based on the number of employees at the site.

The future development would have 13 full time employees who would be engaged in work on Monday to Saturday between the hours of 6:00am – 10:00pm. The total number of off-street parking spaces would be 10, all of which would be used for staff parking. Opportunities for car-pooling amongst staff members as well as the use of public transport when travelling to/from work would mean that the 10 car parking spaces would adequately cater for the 13 employees at the facility.

As the nature of the future facility would predominately comprise automated processes and waste sorting activities, it would be expected that visitation patterns to the facility would be infrequent. Therefore, there would not be a requirement to provide visitor parking as part of the proposal.

Based on this, a total of 10 car parking spaces would sufficiently accommodate the parking demand at the future facility while also fulfilling the objectives as set out in the DCP.

Hence, the proposed 10 car parking spaces are considered to be adequate for the future facility.

The DCP also specifies that industrial developments are to comply with the Building Code of Australia (BCA), Clause D3.5, the proposed development is classified as a Class 5, 6, 7b, 8 and 9a (ie. factory) building and has a disabled car parking provision of one spaces for every 100 car parking spaces or part thereof. Applying the accessible parking rate as per the BCA it is required to provide 0.13 accessible parking spaces for the proposed development.

This generates a miniscule accessible parking provision for a site which is considered to have infrequent disabled persons who require to park and leave their vehicle.

A Traffic Controller would be present at all times at the site entry who would manage and direct all traffic and any pedestrians. Based on the site operation and functionality, accessible spaces would not be provided as part of the future development.

6.7.4.3. Access and Manoeuvring

The proposed internal access arrangements have been designed to cater for the largest vehicle used to enter and exit the site in a forward direction. The swept path analysis includes a 19 metre articulated vehicle (semi-trailer), a 19.6m truck and quad-dog combination and a 25-26m B-double truck. The TIA utilises AutoTURN to analyse the vehicle swept path. A full analysis of all swept path scenarios is provided within Appendix C of the TTPP Transport Impact Assessment at **Appendix G. Figure 22** provides a swept path analysis of a 25m B-double truck, which represents the largest vehicle required to access the site

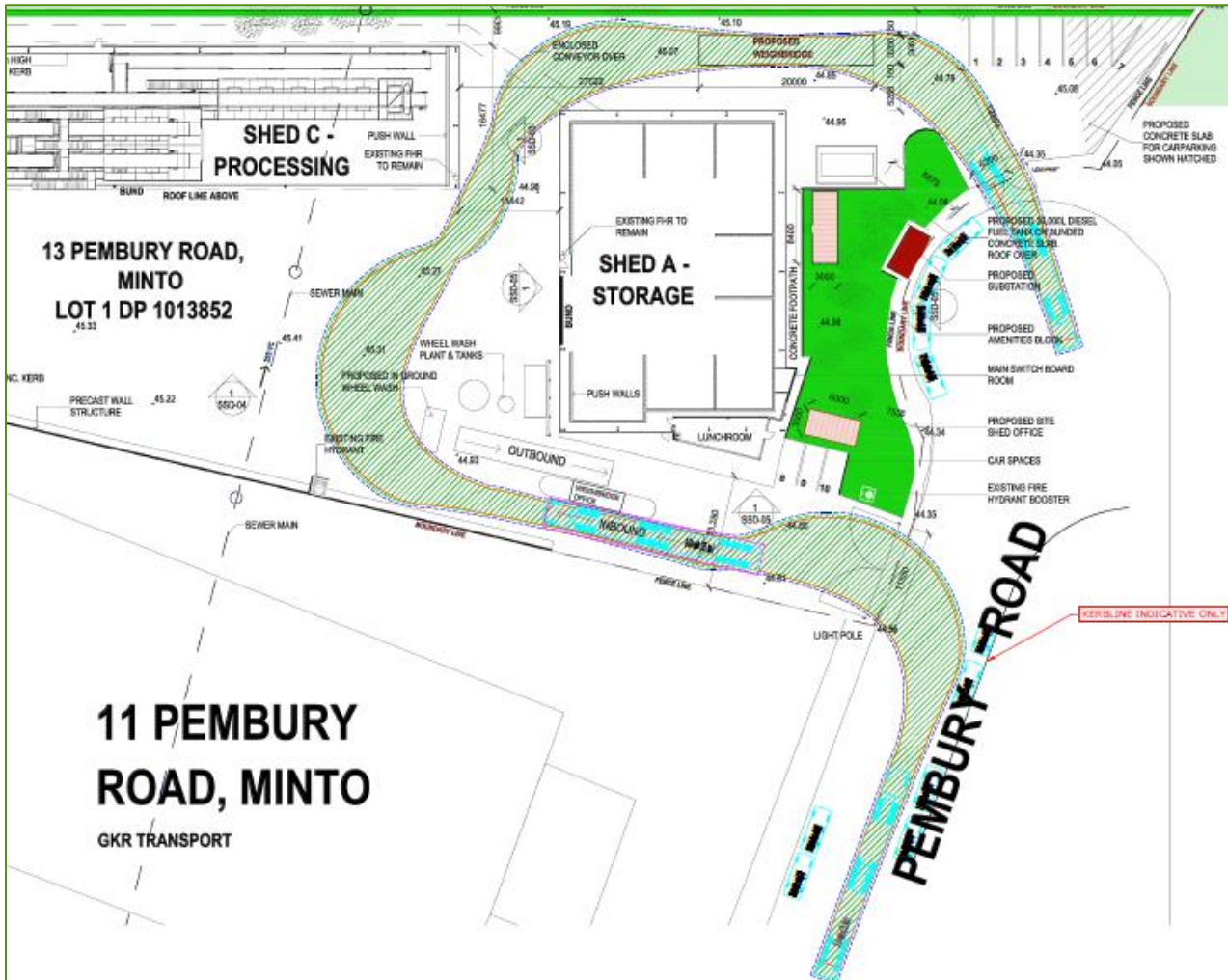


Figure 22 Swept Path Analysis for 25.0m B-Double

Source: TTPP(2017)

The manoeuvring arrangements and swept path plans clearly demonstrate that the proposed site layout and arrangements would successfully allow these large vehicles to enter and exit the site, via the weighbridges, in a forward direction with no reversing movement. Such movements can be undertaken without impacting on parked cars within the road reserve or crossing of the road centre line.

In summary, the operational impacts associated with the proposed development on the local road network are considered acceptable. It is also evident that there is sufficient capacity in the road network to accommodate the site operations vehicle movements with spare capacity to cater for incremental growth in the locality.

6.7.5. Correlation between material types and vehicle movements

It is expected that the type of material received at the Minto facility would be heavy mixed waste material such as soil, brick and concrete, rock and sandstone and timber. In the site operator's experience, these are the most common types of waste received, particularly from its infrastructure projects.

The operator has acquired tenders for several infrastructure projects which has resulted in predominantly 75% of construction and demolition waste and 20% soil being processed through the site. The remainder 5% of waste streams are insignificant and comprise of wood, non-chemical manufacturing waste, asphalt, paper and cardboard, household waste (municipal clean-up), office and packaging and (VENM) Virgin Excavated Natural Material.

Generally, these materials are collected in vehicles which have a relatively large cubic metre capacity. This effectively means that the 220,000-tonne limit (if one assumes that it is reached over any prescribed 12-month period) will be received by fewer vehicles because:

- the vehicles delivering material to the facility would have a larger Gross Vehicle Mass (GVM) and therefore increased net capacity; and
- the density per cubic metre of material from the infrastructure projects is expected to be significantly greater than the average density of total material received by the facility.
- This effectively means that larger trucks carrying larger loads/mass would require less vehicle movements.

6.7.6. Waste Delivery Schedule

Waste deliveries to the Minto facility by the site operator's fleet would be scheduled with the operator prior to the waste leaving its point of origin. Currently, the site operator utilises a live logging system which allows customers to log a request via telephone from which vehicles and bins can be allocated to drivers via a mobile application (app) that is exclusive to the site operator. Although public deliveries (i.e. non-site operator trucks) are not required to book-in ahead of time, they will be encouraged to do so. The site operator's fleet are tracked via GPS through the operator's mobile app. Hence, trucks can be diverted to other nearby facilities by the site operator, if required.

After sorting and processing, the product materials are stockpiled within Shed A and transported off-site. All recovered materials are transported off-site for reuse, recycling or further recovery using 19m semi-trailers and 25m B-doubles. Where it is possible, waste removal would be scheduled to take place outside of peak hours to minimise potential overlap between inbound and outbound trucks.

6.7.7. On-site vehicle stacking

TTPP undertook an assessment of stacking of different vehicle types and also expected scenarios for the site operation. It was identified that trucks are able to stack (or queue) within the designated spaces onsite. Stacking is to be managed by Traffic Controllers. It is noted that there is provision to stack vehicles at the site entry prior to passing over the weighbridge, which will reduce the likelihood of queuing extending into the road reserve.

As a worst case scenario, a total of 17 stacking spaces are provided along the eastern boundary of the site that can satisfactorily accommodate a mixture of vehicle types, ranging from vans/utes to 19m semitrailers. As summarised in **Appendix D**, a maximum of 51 trucks will enter the site during the busiest period, that is, between 12:00pm and 1:00pm.

TTPP have observed operations at a similar operating resource recovery facility in Auburn with similar waste delivery scheduling, safety protocols and vehicle stacking operations. Based on the busiest period of the busiest day it is expected that the time between entry and exit for one truck would be slightly greater in comparison to that at Auburn due to the increased number of vehicles in the stacking circulation.

At Minto, it is estimated that a truck is to be onsite for a duration of around 20 minutes between entry and exit, which has been assessed on the basis that:

- a pre-determined schedule of waste deliveries for the site operator's trucks and outbound waste loads is compiled daily;
- the presence of site Traffic Controllers/Officers and enforcement of driver protocols would enhance vehicle operations onsite; and
- limiting distribution of waste product materials by large trucks to outside of peak.

TTPP prepared a conservative estimation of trucks on the site based on the busiest period of the day and noted that based on a rate of 20 minutes per vehicle, each stacking space could accommodate 3 vehicles in one hour (60 minutes/ 20 minutes). Therefore, in one hour there would be a turnover of 51 vehicles (3 vehicles x 17 spaces), which would be able to adequately store the anticipated 31 trucks during the peak hour. It was deduced that based on typical future operations, the site has capacity to stack more vehicles than the expected volume in the worst-case scenario. Queuing of heavy vehicles will be managed within the site and are not expected to queue back onto Pembury Road. The proposed queuing arrangements are provided in **Figure 23**.

Once light waste is separated in Shed C, a Liebherr Hydraulic Excavator transfers this waste from the waste storage bays onto waste collection trucks which transport waste off-site. A front-end loader will be used on-site to transfer all other processed waste from Shed C to Shed A as needed. The same loader will be used to load material out of Shed A onto trucks for removal.

With regard to operations, material will not be transferred between Shed C and Shed A while waste collection trucks are being loaded. Storage bays are to be emptied when the site is not busy, hence, eliminating interference with vehicle movements on-site. Soil is transferred by an enclosed conveyor from Shed C to Shed A which does not disrupt vehicle movements in any manner.

There would be no conflict between the loader and vehicles whilst on-site as a result of the above operations. Also, there would be no impediment to the loader operations since vehicles will not queue outside of stacking spaces and Traffic Controllers will be appropriately positioned throughout the site to supervise these movements.

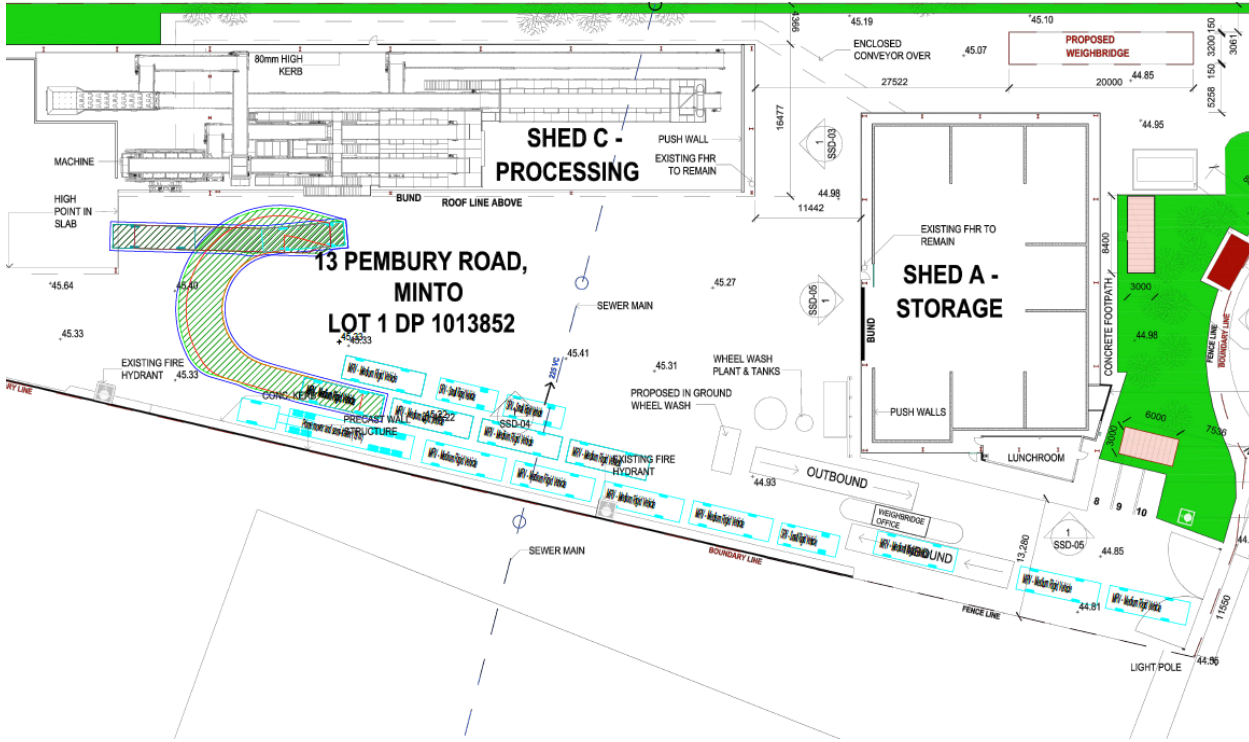


Figure 23 Proposed Queuing Arrangements

Source: TTPP 2017

6.7.8. Construction Traffic Impact

Construction activities associated with the proposed development would primarily involve the delivery and installation of new site infrastructure. Construction activities are not predicted to hinder site operations as they would mostly comprise off short term activities associated with the delivery of materials, plant and equipment. Construction vehicles are to be accommodated on site.

TTPP predicted construction traffic generation to comprise an average of 8 daily two-way truck movements or 4 trucks. Consequently, construction traffic is not predicted to compromise the safety and function of the surrounding road network.

6.7.9. Mitigation and Management Measures

To reduce the likelihood of noise exceedances emanating from the proposed facility, an Operational Traffic Management Plan (OTMP) would be prepared to form part of a comprehensive OEMP. This plan would be submitted to the Principal Certifying Authority (PCA) prior to the issue of a certificate under section 109C of the Act. The OTMP would contain:

- Physical and operational measures (including signage) to mitigate noise impacts from vehicles accessing and leaving the site;
- Maintaining internal vehicle swept paths through appropriate line marking to prevent the encroachment of external bin storage on manoeuvring and parking areas;
- On site vehicle queuing;
- Driver education and information to promote driver habits to minimise noise and awareness of preferred heavy vehicle routes; and
- Timetabling and scheduling of vehicles where possible.

Potential impacts associated with construction traffic would be mitigated through the implementation of the CEMP prepared for the site.

6.8. Construction Waste Management Plan

A Construction Waste Management Plan (CWMP) has been prepared and would be implemented prior to the commencement of demolition and construction work. Among other matters, the plan addresses:

- proposed construction hours;
- construction methodology;
- handling of hazardous material (asbestos);
- pedestrian and traffic management during construction;
- stormwater and waste management; and
- construction noise management.

Given the limited scope of construction works, it is felt that implementation of the CEMP would sufficiently ameliorate any short term impacts arising during construction.

6.9. Fire Safety Study

SLR prepared a Fire Safety Study (FSS) to address any concerns the NSW Fire and Rescue may have with the project. Whilst no LPG will be stored or used on the site, the FSS has however made provision for any future use of LPG on the site.

Identified hazards for the Minto facility were identified as:

- Diesel (C1) 30,000L tank (required 5m to onsite protected place and 3m to other chemical stores);
- Unprocessed combustible mixed waste stockpile (up to 500 tonnes);
- Wood Waste (up to 100 tonnes) stored in waste bays;
- Paper and Cardboard (up to 50 tonnes) stored in waste bins;
- Plastic waste (up to 100 tonnes) stored in waste bays; and
- Processed Mixed Waste for landfill (up to 250 tonnes) stored in waste bays.

The FSS made several recommendations for fire protection systems in the form of fire hydrants, fire hose reels, fire extinguishers and sprinkler system within sheds, noting that some of these are existing measures. Fire prevention measures were identified as:

- The buildings have been designed compliant with the requirements of the Building Code of Australia (BCA).
- Electrical installations are installed and maintained compliant with relevant Australian Standards, including AS 3000:2007 - Electrical Wiring Rules.
- Fire extinguishers, hose reels, fire hydrant system and sprinkler system are installed at designated locations compliant with relevant Australian Standards and BCA.
- Appropriate warning/identification signs are installed for fuels and fire protection equipment.
- Certified diesel tank is installed.
- Diesel fuel tank bund design includes minimum capacities for the applicable storage size of the fuel tank.
- Annual maintenance and testing will be undertaken.
- General housekeeping procedures will be regularly undertaken and the areas are kept clear of any combustible materials.
- On-going site-specific training for employees and contractors in the use of fire extinguishing/protection equipment.

Figure 24 details the general arrangements and locations of the fire safety measures / systems for current and future site operations.

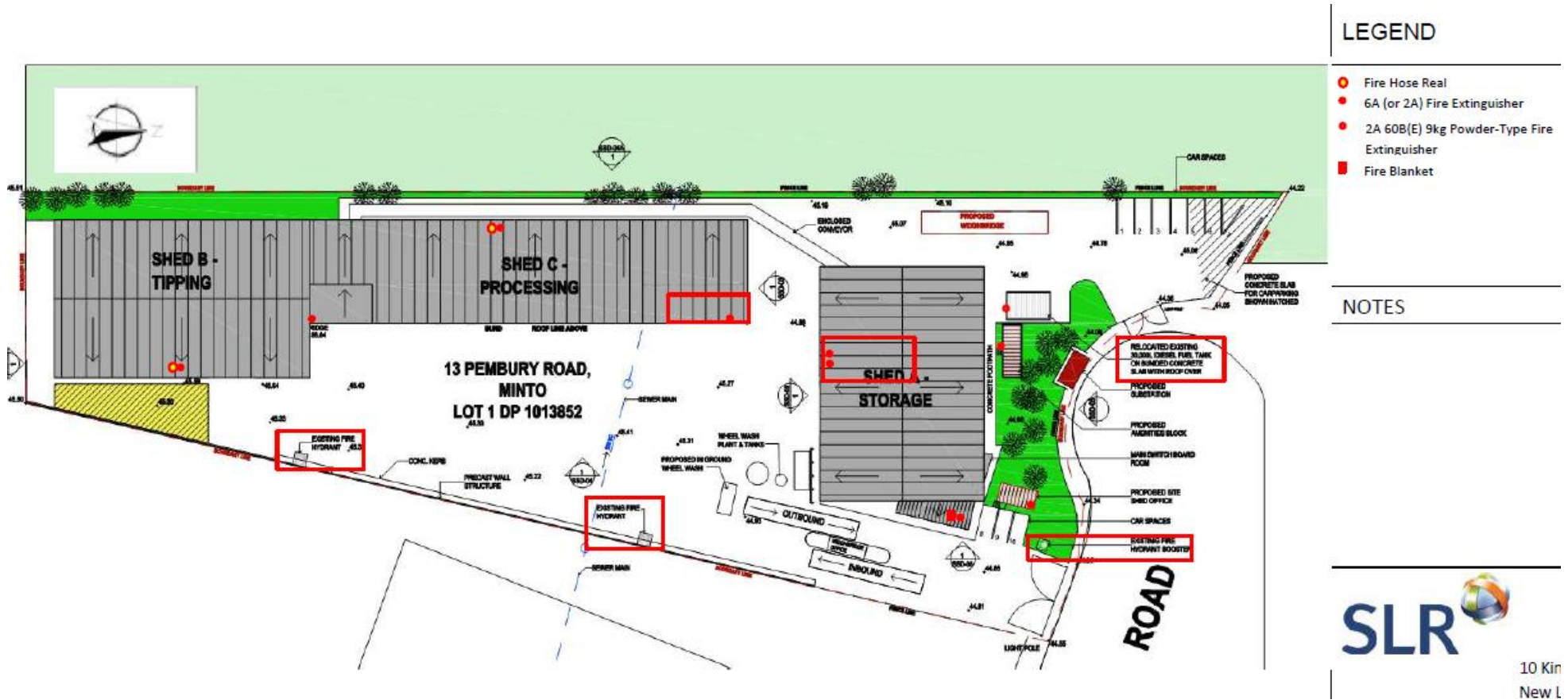


Figure 24 Location of Proposed Fire Safety Measures

With regard to the management of firewater, the proposed stormwater management plan details the drainage system for the site and a filtration system to clean storm water before it is released. The drainage system has been designed to include a gate valve to the stormwater pipe where it exits the site. In the event of a fire and the requirement to manage firefighting water, the gate valve can be closed allowing the water to be appropriately managed to prevent offsite contamination. Consideration has been given to the containment of fire water along the western boundary and preventing any runoff entering directly into the Bow Bowing Canal. The site drains to the east and therefore is unlikely to present a risk to the canal from fire water runoff.

6.10. Cumulative Impacts

This section considers the potential cumulative impacts that may arise as a result of the proposal. The cumulative impact assessment combines the residual impacts of the proposal with the impacts of existing and approved development on site and in the immediate locality. Given the proximity of the proposal to other industries, certain impacts such as dust, traffic, noise, and water quality are likely to contribute to existing environmental impacts from other facilities in the locality.

The potential for cumulative impacts have been assessed by the individual technical studies prepared as part of this EIS. In this regard, cumulative impacts have been assessed and incorporated into the mitigation measures with no significant cumulative impacts identified. Where applicable, the technical studies have adopted a worst case scenario approach to enable a conservative precautionary outcome. The following technical studies assessed cumulative impacts within the context of the proposal and other industries:

- **Noise:** Predicted noise impacts are cumulative in that they account for background noise emissions, to which predicted noise levels emanating from the proposal were added. A comparison of predicted noise emissions from the proposal against measured daytime, evening and night time (morning shoulder) noise levels at representative residences and other receivers shows that proposed operations would not significantly increase cumulative noise generation;
- **Air quality:** The air quality predictions are cumulative as the study used regional baseline data to which emissions from the Project were added. Through utilising appropriate mitigation measures, the proposal would have a limited impact on air quality, either as deposited dust or suspended dust concentrations. There is no predicted increase in the occurrence of exceedances of air quality criteria. No odour causing waste would be accepted at the facility and accordingly no odour emission is predicted;
- **Traffic:** The traffic assessment considers cumulative impacts by undertaking baseline traffic counts combined with an analysis of existing and predicted vehicle movements associated with the site. Vehicle movements associated with the proposal would not have a significant impact on the levels of service or capacity of the existing road network indicating that cumulative impacts would be minor and acceptable.
- **Water Cycle Management:** The soil and water assessment indicates that cumulative impacts would be minimal, and likely to result in an improvement in water quality. The proposal is not predicted to increase the volume or intensity of stormwater discharging from the site. Similarly, modelling predicts that additional stormwater quality measures proposed would improve the quality of stormwater discharge from the site and reduce the likelihood of negative cumulative impacts on the catchment.

- **Socio-economic:** There are positive socio-economic benefits created by the proposal through increasing recycling and resource recovery activities in the locality, increased direct and indirect employment opportunities and through supporting the sustainable growth of metropolitan Sydney. The positive socio-economic impacts would outweigh any potential localised environmental impacts which may arise. Furthermore, the proposal would, allow for the recovery of up to 85% or 187,000 tonnes of waste per annum to be diverted from land fill. Consequently, this would reduce demand on existing landfills servicing Sydney and reduce the overall environmental footprint of the city.

The site operator collects, separates, recycles and processes approximately 27% of NSW's construction and demolition waste. This demand is growing and the site clients, many of which are building the government infrastructure projects important to NSW, require the business to manage this waste on their behalf in an environmentally sustainable manner. The services include:

- Recycling Centres;
- Skip Bins;
- Commercial Waste;
- Liquid Waste; and
- Contaminated Soils.

6.11. Summary of Mitigation Measures

The mitigation measures proposed to be implemented to ensure any impacts arising from the construction and operation of the resource recovery facility are minimised as summarised in **Table 27** below.

Table 27: Summary of proposed management and mitigation measures

Issue	Proposed Mitigation Measure
Noise	<p><u>Operations</u></p> <p>Preparation of a Noise Management Plan (NMP) as part of the OEMP. The NMP would address matters such as:</p> <ul style="list-style-type: none"> ● Limiting site hours of operation to align with the NIA. ● Implementation of a general vehicle speed limit of 5 km/hr. ● Vibration management – handling of heavy materials; ● Requirements for ongoing maintenance of fixed and mobile plant in accordance with manufactures specifications; ● Development of protocols to ensure processing operations are undertaken wholly within the processing building; and ● Procedures to handle complaints which would include monitoring requirements to verify exceedances to any thresholds relevant to the project. <p><u>Construction</u></p> <ul style="list-style-type: none"> ● Implementation of the Construction Environmental Management Plan (CEMP) will allow for the monitoring and management of noise generated during construction.

Issue

Proposed Mitigation Measure

Traffic and AccessOperations:

An Operational Traffic Management Plan (OTMP) would be updated to manage traffic impacts associated with the development and would form part of the OEMP. The OTMP would contain:

- Identification of preferred routes to minimise noise impacts on the surrounding community;
- Physical and operational measures (including signage) to mitigate noise impacts from vehicles accessing and leaving the site;
- Measures to limit the impact of traffic noise
- Maintaining internal swept vehicle paths through appropriate line marking to prevent the encroachment of external bin storage on manoeuvring and parking areas;
- Driver education and information to promote driver habits to minimise noise and awareness of preferred heavy vehicle routes; and
- Timetabling, scheduling and vehicle booking systems where possible.

Construction:

The CEMP would include measures to mitigate impacts associated with construction traffic including but not limited to:

- Hours of operations;
- Temporary parking arrangements;
- Access and manoeuvring arrangements;
- Traffic control requirements; and
- Oversize Vehicle Permits and arrangements (e.g. floating of plant and equipment).

Air Quality and Greenhouse GasOperations:

An Air Quality Management Plan (AQMP) would be prepared to form part of a comprehensive OEMP. The AQMP would be prepared with regard given to the AQIA and address matters such as:

- The regular maintenance of the operator-activated overhead dust suppression system;
- Use of a street sweeper over external hardstand areas;
 - Maintain protocols to ensure waste stored externally (except for waste awaiting loading onto vehicles) is contained within covered bins;
 - Use of hand held hoses to supplement overhead dust suppression system;
 - Use of hand held hoses within any areas not covered by the overhead dust suppression system;
- Procedures to cease operations if weather conditions have a major negative impact on the operation.
- Maintenance of a general vehicle speed limit of 5 km/hr across all areas of the site.
- Procedure to check all vehicles for soil on tyres prior to leaving the site and where soil is detected on the entrance road (i.e. "track out"), staff will be deployed to sweep the road.
- Maintenance requirements for all on-site, fixed and mobile diesel powered plant (excluding road vehicles) (e.g. manufactures specifications).
- Maintenance requirements of wheelwash and stormwater pits to prevent build up of

Issue

Proposed Mitigation Measure

dust / sediment.

- On-going management of air quality issues such as dust suppression, and outlining the mitigation measures to be implemented to minimise the generation of air pollutants.
- Implement procedures to handle potential odour generating wastes such as green waste or hidden putrescible wastes.
- Implement procedures to handle complaints which would include monitoring requirements to verify exceedances to any thresholds relevant to the project.

Construction

The CEMP would include measures to mitigate impacts associated with air quality (dust) associated with construction. This would include but not be limited to:

- Deployment of dust suppression measures (sprinklers / watercart / hand held hoses) during construction;
- Protocols for restricting construction activities during adverse weather conditions (wind generated dust);
- Use of street sweepers; and
- Regular checking and maintenance of soil erosion and sediment control measures.

Greenhouse Gases

The following mitigation and management measures will be implemented at the site to minimise greenhouse gas emissions during operations:

- Fixed plant maintenance requirements and practices will be incorporated into the OEMP to ensure all plant is operating in an efficient manner.
- Prior to the release of a Construction Certificate issued pursuant to Section 109C of the EP & A Act, a report addressing the energy efficiency requirements contained in Section J of the National Construction Code (BCA) will be prepared and submitted to the appointed Principal Certifying Authority. This report will document and assess the suitability of lighting and appliances proposed for the site office space.
- Garden waste materials received on site (i.e. low volumes contained in skip bins from household clean up or demolition sites) are picked and stored separately, then transported off site to a local facility for recycling (i.e. mulched, chipped and/or composted). The final OEMP will include details relating to the identification, handling and diversion of greenwaste.

Issue

Proposed Mitigation Measure

Contamination

A Construction Environmental Management Plan (CEMP) will be prepared prior to the commencement of works or the approval of a Construction Certificate under section 109C of the Act.

The CEMP will further report on the results of subsurface materials testing and will provide protocols to ensure the health and safety of construction workers when handling or working within disturbed areas and will include protocols for managing groundwater should it be encountered.

Any testing of material will be undertaken in accordance with the relevant guidelines made under the CLM Act. Should further approvals be required to undertake construction or remediation work, they will be sought and secured prior to the commencement of any works.

An updated PIRMP would be developed to provide management protocols in the event of an incident associated with the proposal. The updated PIRMP will be submitted to the NSW EPA as part of any application to modify the EPL for the site.

Water Cycle ManagementOperations

A Water Cycle Management Plan (WCMP) will be prepared to form part of a comprehensive OEMP. The OEMP will address matters such as:

- The regular maintenance of control measures including:
 - Stormwater 360 Stormfilter treatment device;
 - Litter baskets;
 - Rainwater tank;
 - Gutters and downpipes;
 - Sweeping of internal and external hardstand areas;
 - Cleaning and removal of any leachate generated from blind sumps; and
 - Fogging system.
- Procedures to ensure all wastes (except waste awaiting loading onto vehicles) are stored in an enclosed environment.
- Maintenance of a maximum vehicle speed limit of 5 km/hr across all areas of the site.
- Procedure to check all vehicles are inspected for soil on tyres prior to leaving site and where soil is detected on the entrance road (i.e. "track out"), staff will be deployed to sweep the road.
- Procedures for monitoring any water quality limits as specified in the EPL.

Construction

The CEMP would include measures to mitigate impacts associated with water quality associated with construction. This would include but not be limited to:

- Regular checking and maintenance of soil erosion and sediment control measures;
- Procedures for monitoring water quality during the construction phase if required; and
- Procedures for managing groundwater should it be encountered.

Issue	Proposed Mitigation Measure
Hazardous and Dangerous Goods	<p><u>Operations</u></p> <p>To ensure the risks associated with the storage of potentially dangerous goods are not increased, the following measures are proposed:</p> <ul style="list-style-type: none"> • Storage of diesel fuel is limited to the quantities contained in this EIS and the SEPP 33 Risk Screening Assessment; • Diesel fuel is stored within a bunded area and in isolation of any other flammable liquids. <p>Should the operators seek to increase the capacity of the existing diesel store or introduce other potentially dangerous goods, an assessment of the likely risks and storage thresholds can be undertaken in accordance with the SEPP 33 Risk Screening Assessment Criteria.</p>
Visual Impact	<p>Landscaped areas shall be maintained throughout the site operation.</p>
Operational Waste Management	<p>A development specific Operational Environmental Management Plan (OEMP) will be updated to control the day to day handling of waste both on and off site. The OEMP will include protocols and procedures relating to:</p> <ul style="list-style-type: none"> • Waste acceptance; • Waste source control; • On site storage requirements; • Resource recovery requirements; • Green waste management; • Operational noise management; • Dust and air quality management; • Management and maintenance of stormwater infrastructure; • Transport and Disposal (Waste Tracking); and • Stockpile Management; • Special Waste Management (Asbestos and Tyres); • Third party material sampling; and • Weighbridge operation (including calibration). <p>A final OEMP will be reviewed by the EPA prior to the variation of the EPL. Commencement of operations or the release of an occupation certificate under Section 109C of the EPA Act. The OEMP will be reviewed on an annual basis or as required under the EPL or the SEQ Management System.</p>
Construction and Environmental Management	<p>A CEMP will be submitted to the PCA prior to the issue of relevant certificate under section 109R of the Act. The plan will address:</p> <ul style="list-style-type: none"> • proposed demolition and construction hours; • pedestrian and traffic management during demolition and construction; • stormwater and waste management; • noise management; and • Contamination.

7. Conclusion

This EIS has been prepared to assess the potential impacts of an existing recycling facility at 13 Pembury Street Minto to increase in processing capacity to 220,000 tonnes per annum.

As demonstrated throughout the EIS, the proposed development with the implementation of proposed mitigation measures will not result in any significant adverse environmental impact with regard to the following:

- access, traffic and parking;
- noise and vibration impact;
- management of hazardous and dangerous goods;
- drainage and stormwater management;
- contamination;
- fire safety;
- air quality;
- operational management; and
- construction and environmental management.

Given the merits of the proposal outlined in the EIS, the proposed development will have significant benefits to the local area and NSW by allowing for waste to be processed in an efficient, safe and timely manner. The proposed mitigation measures for potential environmental impacts will be incorporated into the proposal in the form of a comprehensive Operational Environmental Management Plan or are to be implemented prior to the issue of a certificate under section 109C of the *Environmental Planning and Assessment Act 1979*. Any concerns raised by key stakeholders, including the local community and government agencies have been documented and addressed in the EIS.

An approval of this SSD application will assist the Government in achieving key objectives of the *Plan for Growing Sydney* (the Plan) by providing a suitably located resource recovery facility which would be capable of processing up to 220,000 tonnes of waste per annum with minimal environmental impacts. To achieve the objectives of the Plan, it is essential for facilities such as the Minto resource recovery facility to be given the necessary support and protection and to allow for the effective diversion of waste from landfill.

An approval by the Minister for Planning or his delegate for the increased capacity and minor associated building works required to compliment the site operation at Minto would result in an improved outcome in the form of an efficient resource recovery facility which, when compared with current operations would be better equipped to serve the current and future needs of the local community and construction industry.

Appendix A

Secretary's Environmental Assessment Requirements



Appendix B

Community Consultation Strategy

Appendix C

Topographical and Detail Survey

Appendix D

Current Notice of Determination



Appendix E

Environment Protection License

Appendix F

Architectural Plans



Appendix G

Transport Impact Assessment

Appendix H

Capital Investment Value Report



Appendix I

Soil and Water Impact Assessment



Appendix J

Phase 1 Contamination Investigation

Appendix K

Preliminary Hazard Analysis

Appendix L

Noise & Vibration Assessment

Appendix M

Air Quality Impact Assessment & Green House Gas Assessment

Appendix N

Fire Safety Study

Appendix O

Construction Noise and Vibration Assessment

Appendix P

Construction Waste Management