

Re.Cycle Enfield Materials Recovery Facility Expansion (SSD-94439711)

Environmental Impact Statement



Prepared for:
Re.Cycle Operations Pty Ltd

March 2026

Acknowledgement of Country

EME Advisory recognises the continuing connection First Nations people have to their land. We would like to acknowledge the Traditional Custodians of the lands on which we work and pay our respect to Elders past, present and emerging.

Table of Revisions

Revision	Date	Description	Author	Reviewed	Approved
Rev1	07/02/2026	Final Environmental Impact Statement for REAP Review	Paul Bryant	Brian Cullinane	Julian Ardas
Rev 2	09/02/2026	Final EIS for DPHI Adequacy Review	Paul Bryant	Brian Cullinane	Brian Cullinane
FINAL	14/06/2026	Final for LODGEMENT	Paul Bryant	Brian Cullinane	Brian Cullinane

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Signed Declaration

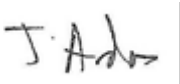
Project Details:		
Project Name:	Re.Cycle Enfield Materials Recovery Facility Expansion	
Application Number	SSD- 94439711	
Address of the land for which the development application is made:	Lot 24 in DP 1200563 40-42 Madeline Street, Strathfield South NSW 2136	
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The undersigned declares that this EIS: - has been prepared in accordance with the Environmental Planning and Assessment Regulation 2021; - contains all available information relevant to the environmental assessment of the development, activity or infrastructure to which the EIS relates; - does not contain information that is false or misleading; - addresses the Planning Secretary's environmental assessment requirements (SEARs) for the project; - identifies and addresses the relevant statutory requirements for the project, including any relevant matters for consideration in environmental planning instruments; - has been prepared having regard to the Department's State Significant Development Guidelines -Preparing an Environmental Impact Statement; - contains a simple and easy to understand summary of the project as a whole, having regard to the economic, environmental and social impacts of the project and the principles of ecologically sustainable development; - contains a consolidated description of the project in a single chapter of the EIS; - contains an accurate summary of the findings of any community engagement; and - contains an accurate summary of the detailed technical assessment of the impacts of the project as a whole.		
Signature:		
Date:	10 March 2026	

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Glossary & Abbreviations

Abbreviation	Definition
ACT	Australian Capital Territory
AHIMS	Aboriginal Heritage Information Management System
Approved Methods	Approved Methods for the Sampling and Analysis of Air Pollutants in NSW (EPA, 2022)
AQIA	Air quality impact assessment
AQMS	Air quality monitoring station
ASS	Acid sulfate soils
AVD	Average vehicle delay
AWS	Automatic weather station
BC Act	<i>Biodiversity Conservation Act 2016</i>
BDAR	Biodiversity Development Assessment Report
Biodiversity and Conservation SEPP	<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>
BoM	Bureau of Meteorology
CBD	Central Business District
CDS	Container deposit scheme
CLM Act	<i>Contaminated Land Management Act 1997</i>
CO ₂ -e	Carbon dioxide equivalent
CSP	ceramic, stone and porcelain
Council	Strathfield Council
DA	Development Application
DAWE	Commonwealth Department of Agriculture, Water and the Environment
dB(A)	A-weighted decibels
DCP	Development Control Plan
DEC	Department of Environment and Conservation NSW
DGs	Dangerous goods
District Plan	<i>Eastern City District Plan</i> (GSC, 2018b)
DoS	Degree of saturation
DP	Deposited Plan
DPE	Department of Planning and Environment
DPHI	Department of Planning, Housing and Infrastructure
EIS	Environmental Impact Statement
EDC	Estimated development cost
EMEA	EME Advisory
EP&A Act	<i>Environmental Planning and Assessment Act 1979</i>
EP&A Regulation	<i>Environmental Planning and Assessment Regulation 2021</i>
EPA	Environment Protection Authority

Abbreviation	Definition
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i>
EPI	Environmental Planning Instrument
EPL	Environment Protection Licence
ERP	Emergency response plan
ESD	Ecologically sustainable development
ESIP	Emergency services information package
FRNSW	Fire and Rescue NSW
FSR	Floor Space Ratio
FSA	Fire safety assessment
GBP	Glass beneficiation plant
GFA	Gross floor area
GHG	Greenhouse gas
GSC	Greater Sydney Commission
HIPAP	Hazardous Industry Planning Advisory Paper
IPC	Independent Planning Commission
JRPP	Joint Regional Planning Panel
kL	kilolitre
Km	Kilometre
LA _{eq}	A-weighted, equivalent continuous sound level
LEP	Local Environmental Plan
LGA	Local Government Area
LoS	Level of service
LSPS	<i>Strathfield 2040: Local Strategic Planning Statement</i>
m	Metres
MNES	matters of national environmental significance
MRF	Materials Recovery Facility
National Waste Policy	<i>National Waste Policy: Less Waste, More Resources 2018</i>
NCA	Noise catchment area
NCC	National Construction Code
NPI	<i>NSW Noise Policy for Industry</i>
NSW	New South Wales
NVIA	Noise and vibration impact assessment
NWPAP	<i>National Waste Policy Action Plan 2019</i>
PCR	Paper and cardboard recycling
PHA	Preliminary hazard analysis
Planning Systems SEPP	<i>State Environmental Planning Policy (Planning Systems) 2021</i>
PNTL	Project noise trigger level
POEO Act	<i>Protection of the Environment Operations Act 1997</i>

Abbreviation	Definition
RBL	Rating background level
Re.Cycle	Re.Cycle Operations Pty Ltd
Region Plan	<i>Greater Sydney Region Plan</i> (GSC, 2018a)
Resilience and Hazards SEPP	<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>
RMS	Roads and Maritime Service
SA	Statistical Area
SEARs	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SIA	Social Impact Assessment
SIA Guideline	<i>Social Impact Assessment Guideline for State Significant Projects</i> (DPIE, 2021)
SRD SEPP	<i>State Environmental Planning Policy (State and Regional Development) 2011</i>
SSD	State significant development
SSI	State significant infrastructure
Standard Instrument	<i>Standard Instrument – Principal Local Environmental Plan (2006)</i>
T	Tonnes
TAPM	The Air Pollution Model
TfNSW	Transport for NSW
TIA	Traffic impact assessment
tpa	Tonnes per annum
Transport and Infrastructure SEPP	<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>
TSP	Total suspended particulates
VIC	Victoria
WARR Act	<i>Waste Avoidance and Resource Recovery Act 2001</i>
Waste Strategy	<i>NSW Waste and Sustainable Materials Strategy 2041—Stage 1: 2021–2027</i> (DPIE, 2021)

Summary

Background

This Environmental Impact Statement (EIS) has been prepared on behalf of Re.Cycle Operations Pty Ltd (Re.Cycle) [as owned by Re.Hold Pty Ltd (Re.Group)] to accompany a State Significant Development (SSD) application for an increase in co-mingled waste throughput at an existing materials recovery facility (MRF) at 40-42 Madeline Street, Strathfield South.

The existing site has an approved throughput of 30,000 tonnes per annum (tpa) of paper and cardboard (PCR) and 69,900 tpa of mixed recyclables comprising mixed metals, glass, mixed paper and mixed plastics (MRF). Re.Cycle is seeking approval to increase the processing of co-mingled waste throughput at the existing MRF by an additional 100,100 tpa, thereby increasing the total throughput of the MRF for all materials from 99,900 tpa to 200,000 tpa.

Site context

The site is situated on the eastern side of Madeline Street in an established industrial area. It is surrounded by industrial land uses to the north, south and west as shown in **Figure S 1**. Adjoining land to the south is occupied by a waste transfer station (i.e. Aussie Skips) and a 4WD/heavy vehicle mechanical repair business (i.e. Pro-Axle Australia). Vacant undeveloped land adjoins the site to the east, while on the western side of Madeline Street, there is a transport and logistics facility (i.e. K&S Freighters) and a smallgoods food provider (i.e. Kaczanowski & Co).

Low-density residential areas and public recreation areas are located further to the north, south and east. The nearest residential property is located approximately 70 metres (m) to the south-east of the site at No. 2 Chisholm Street. The nearest public space is Cooke Park, located approximately 100m to the south of the site. Cooke Park is one of Strathfield's largest and most popular parks and provides a wide range of sporting and recreational facilities, including sportsgrounds, a skate park and a children's playground.

Feedback from community engagement and Council highlighted concerns about amenity impacts from multiple sources in the industrial area. The EIS responded to this by undertaking detailed noise, tariff and air quality assessments. The air quality assessment included a cumulative air quality assessment of the Project with the adjacent Aussie Skips site in response to a specific request from Council.

What is proposed?

The Project involves an increase in the receipt and processing of co-mingled waste by an additional 100,100 tpa throughput at the existing MRF, which can be undertaken using existing approved site infrastructure and processing equipment without the need for any additional upgrades. Therefore, the Project represents an intensification of operations but does not involve any construction works or changes to the site layout.

Specifically, the Project involves:

- Increasing the MRF throughput from 69,900 tpa to 170,000 tpa, bringing the total maximum processing capacity of the site to 200,000 tpa. Note: No changes are proposed to the approved throughput of the PCR facility (being 30,000tpa);
- A slight variation to the existing approved hours of operation to allow material to be received at the MRF from 4.30am to 6pm, Monday to Saturday. Currently, receipt of materials at the MRF must only take place between the hours of 4.30am and 3pm;
- An additional 58 truck movements per day associated with delivering additional materials to the site (29 in, 29 out) and 13 truck movements per days associated with collection and transport of processed materials off site (7 in, 6 out);

- An increase in the total amount of waste materials permitted on the premises at any one time from 4,200 tonnes to 8,000 tonnes; and
- Employment of an additional six full-time staff (i.e. three additional personnel per shift).

Note: No physical works or changes to the existing approved site layout are proposed.

Project need

The Project supports Local, State, and Federal Government objectives to increase the rate of recycling and resource recovery, while contributing to national sustainability and circular economy goals by providing additional materials processing throughput, including for a growing glass waste stream. By maximising the use of existing infrastructure, the project supports the objectives of National and State strategic plans for better management of waste derived resources. This is particularly advantageous given the increasing volumes of Container Deposit Scheme (CDS) materials collected.

The NSW Government's focus on leveraging a pipeline of forthcoming glass processing facilities, as noted in the NSW Waste and Sustainable Materials Strategy 2041, instead of any immediate plans to construct new glass processing infrastructure, highlights the importance of fully utilising the site's available process and storage capacity to process an additional 100,100 tpa of co-mingled waste, including glass.

Further, with landfill capacity in the Sydney region rapidly depleting, increased recycling and resource recovery of waste materials preserves scarce landfill space for non-recyclable residual waste. By leveraging the site's existing recycling and recovery infrastructure coupled with the site's proximity to sources of waste generation and good transport links, increasing throughput at the site represents the most efficient use of resources and avoids the need to develop a new greenfield site, which in turn delivers economic and environmental benefits.

Community and stakeholder engagement

Preparation of the EIS included a programme of engagement with Government agencies, community and stakeholders.

The engagement process for the Project aimed to:

- Update and inform the local community and stakeholders about the Project, its impacts and benefits;
- Help the local community understand the development approval process and how they can participate in the process;
- Respond to community feedback by making necessary changes to the Project and including appropriate mitigation measures in the EIS; and
- Enable authentic conversations, through all stages of the EIS, by using quality engagement and communication techniques and materials that enable community members and stakeholders to provide informed feedback.

Engagement activities included a newsletter drop, online survey, website updates, door knocking, stakeholder briefings, a community drop-in session and email notifications.

Feedback from engagement highlighted concerns about extended operating hours, increased traffic levels, noise, air / odour and increased prevalence of vermin. Noise concerns reflected existing experiences for some residents with vehicle and forklift noise in the industrial area in early morning hours.

Council feedback also reflected similar issues and the need to consider the cumulative air quality impacts of the Project with the neighbouring Aussie Skips site located at 84 Madeline Street.

The assessments undertaken for the EIS, including noise, air and traffic, correspond to some of the key issues raised during engagement. The assessments have included consideration of cumulative impacts with other existing developments in the area including Aussie Skips.

Where the assessments have identified impacts, specific mitigation measures have been recommended.

Key environmental issues

Air Quality and Odour

The air quality assessment considered impacts associated with dust (particulates) and odour from the following sources:

- Wheel-generated particulate emissions from the operation of the trucks and other site vehicles on paved road surfaces;
- Particulate emissions from the unloading and loading of materials from trucks;
- Particulate emissions from materials handling (sorting) and processing; and
- Odour from a minor quantity of contaminated materials.

The assessment included a cumulative impact assessment with the neighbouring Aussie Skips site.

The results of the assessment indicate that all emissions will be within air quality criteria. Modelled emission concentrations associated with the operation of the Project and the Aussie Skips site at nearby receptors are minimal and would not result in any additional exceedances of the air quality criteria.

Noise and Vibration

The noise assessment considered the potential for noise sources from the site to impact on residential and other receivers in the surrounding area.

The assessment noted a number of recent changes in the noise environment on site and surrounding area including:

- Extension and increase in height of the noise wall on the Aussie Skips site;
- Enclosure of a large area of the Aussie Skips site;
- Enclosure of air compressors on the Re.Cycle site.

These changes contributed to a reduction in noise emissions from the site and provide a barrier between emission sources and nearby residential areas.

Additional noise mitigation measures have also been implemented on the Re.Cycle site following approval of Modification 4 in February. These measures, referred to as 'Alternative Mitigation' include repairing cracks in building facades and increase the height of the noise wall and contribute to the predicted noise emissions from the site to the surrounding environment satisfying the EPA's criteria and sleep disturbance targets at all nearby receivers during all time periods.

Traffic and Access

The Project will increase daily truck trips by 71 movements (36 in, 35 out). The assessment of the impact of

increased truck movements on the road network concluded the intersection of Cosgrove Road and Cleveland Road will experience no change to the average vehicle delay (AVD), while the intersection of Cosgrove Road and Hope Street will experience an increased delay of 0.2 seconds. Both intersections will continue to operate at the highest level of service.

The assessment also concluded that trucks could continue to access and move through the site in a safe manner and that existing approved car parking is sufficient to cater for the small increase in employee numbers.

Fire and Incident Management

Potential fire hazards were identified to determine whether any fire or explosion hazards may impact off-site receptors or have the potential to escalate.

The main hazard identified was the potential ignition of combustible waste in the MRF Receiving Hall. The assessment reviewed existing fire detection and suppression systems and concluded these were sufficient to manage fire risk with recommendations to investigate additional systems to further enhance fire detection and suppression capability.

Hazards and Risk

A review of the quantities of dangerous goods to be stored at the MRF and the associated vehicle movements was conducted and compared to the threshold quantities set out in *Applying State Environmental Planning Policy (SEPP) 33 Hazardous and Offensive Development Assessment Guidelines (DPIE, 2011)*. The results of this analysis indicate the threshold quantities for dangerous goods to be stored and transported will not be exceeded. Therefore, the Project is not classified as a 'potentially hazardous industry' and no further assessment is required.

Greenhouse Gas

The main greenhouse emissions sources from the Project are:

- Consumption of diesel fuel in fixed and mobile plant and equipment at the site;
- Consumption of electricity as part of Project operations;
- Consumption of diesel fuel/unleaded fuel for material transport purposes; and
- Consumption of diesel fuel/unleaded fuel for employee transport purposes.

The assessment of greenhouse gas emissions indicate that the operation of the Project would contribute up to 0.0002% of NSW total GHG emissions in 2020 and up to 0.00005% of Australia total GHG emissions.

Emissions of GHG resulting from the Project will be minimised to the maximum extent practicable by consideration of the following measures:

- The most efficient vehicle and size will be used to minimise the number of trips required and minimise greenhouse gas (and particulate) emissions per tonne of material transported;
- All vehicle/plant and machinery will be turned off when not in use and be regularly serviced to ensure efficient operation, including the optimisation of tyre pressures;
- Where possible, B5 fuel will be used in plant and equipment.

In addition, the recovery of resources to be reused in the production of a range of products minimises greenhouse gases by reducing the need for virgin raw materials such as sand.

Social

A Social Impact Assessment was undertaken using feedback from community and stakeholder engagement and publicly available data regarding social aspects of the locality.

The assessment concluded that operation of the Project is expected to have long-term positive impacts by contributing to long-term sustainability initiatives and reducing waste disposed to landfill, which is aligned with a number of State and local government policies. The Project will also generate up to six additional full-time jobs at the MRF, resulting in a positive social impact.

The SIA acknowledges community concerns in relation to amenity issues such as noise, air and traffic but notes the relevant technical assessments have identified appropriate mitigation measures and assessed the outcomes as consistent with relevant standards and criteria.

Evaluation of the Project

The Project makes an important contribution to State and Federal Government objectives to increase recycling and diversion from landfill by maximising the built capacity of an existing materials recycling facility. In doing so it contributes to strategic environmental outcomes and provides an essential environmental service to communities and businesses while preserving scarce resources for future generations.

The Project is located close to residences and has sought to minimise amenity impacts on these areas. Noise mitigation measures have been implemented on site. This, combined with noise measures implemented on the neighbouring Aussie Skips site, provides mitigation of noise impacts on the residential areas to the east to a level within the assessment criteria.

Assessments of air quality, traffic, fire risk and hazards have similarly concluded the impacts can be effectively managed through a combination of existing and new controls.

The Project provides a significant benefit to community and businesses and supports environmental outcomes through the increased recycling of materials and diversion of waste from landfill. Project impacts have been assessed as low when existing and new mitigation measures are accounted for.

Overall the Project can be considered to have merit and is in the public interest.

Figure S 1 Site context



1 Introduction

This chapter provides a general overview of the Project, identifies the applicant and project objectives, provides a summary of the history of the site and outlines the purpose and structure of the EIS.

1.1 Project Overview

Re.Cycle Operations Pty Ltd (Re.Cycle) (formerly Polytrade Operations Pty Ltd) owns and operates an existing materials recovery facility (MRF) and paper and cardboard recycling (PCR) facility at 40-42 Madeline Street, Strathfield South (the site), being Lot 24 in Deposited Plan (DP) 1200563, located in the Strathfield local government area (LGA). **Figure 1-1** shows the location of the site in its regional context.

The site operates under Development Consent DA 2015/177, granted by the former Sydney East Joint Regional Planning Panel (JRPP) on 26 October 2016, for use of the site as a 'waste management facility'. The approval provides for an annual processing capacity of 30,000 tonnes per annum (tpa) of paper and cardboard and 69,900 tpa of commingled recyclables comprising mixed paper and cardboard, mixed metals (steel, tin and aluminium), glass and mixed plastics.

Re.Cycle is seeking consent to increase the comingled recyclables processing throughput at the MRF by an additional 100,100 tpa (the Project). The additional throughput will be processed through the existing processing infrastructure using available capacity. No additional buildings, plant or equipment or changes to the site layout will be required. If approved, the Project will increase the total throughput for all materials received and processed at the site from the currently approved 99,900 tpa to 200,000 tpa.

Specifically, the Project involves:

- Increasing the co-mingled throughput of the MRF by an additional 100,100 tpa so that total throughput for all materials received and processed at the site increases from the currently approved 99,900 tpa to 200,000 tpa;
- A slight variation to the existing approved hours of operation to allow material to be received at the MRF from 4.30am to 6pm, Monday to Saturday. Currently, receipt of materials at the MRF must only take place between the hours of 4.30am and 3pm;
- The following additional daily vehicle movements:
 - 58 truck movements associated with deliveries to site (29 in, 29 out)
 - 13 truck movements associated with load out from site (7 in, 6 out)
 - 12 light vehicle movements associated with additional employees (6 in, 6 out)
- An increase in the total amount of waste materials permitted on the premises at any one time from 4,200 tonnes to 8,000 tonnes; and
- Employment of an additional six full-time staff (i.e. three additional personnel per shift).

Note: No physical works or changes are proposed as the Project can be accommodated within the existing approved site layout, built form and servicing and using available storage and processing capacity.

Figure 1-1: Site Location - Regional Context



As the Project proposes to increase the waste processing throughput of the existing facility to 200,000 tpa, it is classified as State significant development (SSD) under Section 23(3) of Schedule 1 of State Environmental Planning Policy (Planning Systems) 2021 (Planning Systems SEPP). The SEPP identifies 'development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste' as SSD. Approval for the Project is required under Part 4, Division 4.7 of the Environmental Planning & Assessment Act 1979 (EP&A Act) and it is a requirement that the SSD application be accompanied by an Environmental Impact Statement (EIS).

1.2 Applicant Details

The applicant's details for the Project are provided in **Table 1-1** below.

Table 1-1: Applicant Details

Applicant's Name:	Re.Cycle Operations Pty Ltd
Postal Address	Level 19, 100 Miller Street, North Sydney NSW 2060
ABN:	29 656 197 134
Nominated Contact:	Jacqueline Ong
Contact Email:	jacqueline.ong@re-group.com

Re.Cycle is a subsidiary company of Re.Group Pty Ltd (ABN 76 616 439 779), which is owned by Re.Hold Pty Ltd (ABN 61 616 411 217).

Re.Group is a privately-owned Australian company with the largest network of recycling facilities in Australia, with operations across NSW, Victoria, Queensland, Western Australia, South Australia and the ACT. It also has operations in New Zealand. Re.Group and its related entities (including Re.Cycle) employ over 600 people and provide recycling services for more than four million Australians across more than 35 local government areas. Re.Group's mission is to design, build, operate and optimise infrastructure that enables the maximum amount of waste to be diverted from disposal and positively re-used as a renewable resource.

1.3 Project Objectives

The specific objectives of the Project are to:

- improve the operational efficiency of the existing processing infrastructure at the Enfield MRF;
- meet increasing market demand for the recycling of co-mingled materials such as paper and cardboard and glass;
- contribute to the transition to a circular economy, which aims to eliminate waste and circulate products and materials at their highest value; and
- continue to conduct site operations in an environmentally responsible manner to ensure any potential impacts are minimised.

1.4 Site History

The site has been used as a waste management facility since 1993. On 16 April 1993, Strathfield Council (Council) granted consent for the operation of a paper and cardboard recycling facility on the site (i.e. Development Consent DA 93/1).

In 2016, Development Consent DA 2015/177 was granted by the former Sydney East JRPP for use of the site as a 'waste management facility' with an annual processing throughput of 30,000 tonnes of paper and cardboard, and 69,900 tonnes of mixed metals, glass, mixed paper, and mixed plastic.

The development approved under DA 2015/177 included:

- Relocation of the existing PCR facility from Building 1 to Building 2;
- Assembly of new MRF machinery in Building 1 to process up to 69,900 tpa of additional waste streams, including mixed paper, mixed metals, glass and mixed plastics; and
- Construction of two sets of covered storage bunkers for cleaned glass adjacent to Building 1.

DA 2015/177 has since been modified on three separate occasions (while the most recent modification is referred to as Modification 1, the Council DA tracker use Modification 1 to refer to a Construction Certificate).

On 16 December 2022, the Sydney Eastern City Planning Panel granted approval, under section 4.55(2) of the EP&A Act, for alterations and additions to the existing MRF (i.e. DA2015/177/2). The modification involved changes to the approved site layout to improve operational efficiency, including:

- reconfiguration of uses across the existing buildings, as follows:
 - Building 1 – MRF (glass beneficiation plant);
 - Building 2 – MRF (main mixed recyclables processing line); and

- Building 3 – PCR facility.
- changes to the on-site carparking layout;
- relocation of a substation to the front of the site;
- change of use of two existing external storage bunkers;
- construction of minor additions to Buildings 1 and 2; and
- construction of new external enclosed glass bunkers on the northern side of Building 1.

Note: The modification did not involve any changes to the approved processing capacity at the site.

In November 2023, the Panel approved a further modification to allow a temporary increase in the throughput of the MRF from 69,900 tpa to 120,000 tpa, together with an associated increase in the hours of operation and number of daily truck movements (i.e. DA 2015/177/3). The temporary increase in processing throughput at the MRF was required to enable up to 50,100 tpa of commingled recyclables to be diverted from Re.Group's MRF in Hume, ACT which was destroyed by fire in December 2022.

Specifically, the approved modifications included:

- a temporary increase in the MRF throughput from 69,900 tpa to 120,000 tpa, bringing the total maximum processing throughput of the site to 150,000tpa. Note: No change to the approved throughput of the PCR facility (being 30,000tpa);
- Extending the site's approved operational hours to 7 days a week (to include Sundays);
- An increase of up to 20 additional trucks entering the site per day to transport commingled recyclable material from the ACT facility;
- An increase of up to 3 additional trucks per day for offtake of finished product or residual waste from the site;
- Employing 10 additional staff.

The temporary changes to the site's operations were approved for a four-year period, up to 30 June 2027, reflecting the estimated timeframe required to rebuild and recommission the Hume MRF. After this time, it was anticipated that the MRF would revert back to its original approved annual processing throughput of 69,900 tpa.

Note: No physical works were proposed as part of the modification. The modification did not involve any changes to the operation of the existing PCR facility.

In February 2025, Council approved a Section 4.55(1A) (DA 2015/177/4) modification application to modify minor elements of the approved development as it relates to noise attenuation and liquified petroleum gas (LPG) storage for the Site. The noise measures approved under this modification, referred to as Alternative Noise Mitigation Measures, have been fully implemented on site.

Subject to approval of this SSD application, it is possible the increased operating throughput of 200,000 tonnes per annum may overlap with temporary operations approved under DA 2015/177/3. However, total operating throughput at the site would not exceed 200,000 tonnes per annum regardless of the source of the waste.

Re.Cycle will only commence the receipt and processing of the additional co-mingled waste streams after the 30 June 2027, when the temporary operating period for DA 2015/177/3 ends, or following surrender of DA 2015/177/3, so that the proposed 200,000 tpa limit is not exceeded. Wording to this effect can be discussed with the Department of Planning, Housing and Infrastructure (DPHI) for inclusion in a condition of consent.

Table 1-2 summarises the development consent history for the site.

Table 1-2: Development Consent History

DA No. ^{note}	Status	Description	Waste Type
DA 93/01	Determined by Council on 16 April 1993.	Paper & cardboard recycling facility.	Waste paper & cardboard.
DA 2011/193 Approval under Part 4 of EP&A Act	Determined by Council on 26 June 2012.	Subdivision for 4 allotments and associated drainage works	N/A
DA 2015/177 Approval under Part 4 of EP&A Act - Designated Development.	Determined by Sydney East JRRP on 26 October 2016.	Use of the site as a Waste Management Facility with an annual processing throughput of 30,000 tonnes of paper & cardboard and 69,900 tonnes of mixed metals, glass & mixed plastics.	Waste paper & cardboard. Commingled recycling (mixed metals, glass & mixed plastics).
DA 2015/177/2 Section 4.55(2) Modification	Determined by Sydney Eastern City Planning Panel on 16 December 2022.	Alterations and additions to an approved materials recycling facility.	Waste paper & cardboard. Commingled recycling (mixed metals, glass & mixed plastics).
DA 2015/177/3 Section 4.55(2) Modification	Determined by Sydney Eastern City Planning Panel on 30 November 2023.	Temporarily change hours of operation & enable processing of additional throughput from 69,900 to 120,000 tpa of mixed metals, glass & mixed plastics. (Note: no change to approved throughput for paper & cardboard of 30,000 tpa).	Waste paper & cardboard. Commingled recycling (mixed metals, glass & mixed plastics).
DA 2015/177/4 S 4.55(1A)	Determined by Council on 17 Feb 2025	Modify minor elements of the approved development as it relates to approved noise attenuation, and liquified petroleum gas (LPG) storage for the Site. To amend the noise mitigation measures and increase the limit of LPG cylinders allowed on-site	Waste paper & cardboard. Commingled recycling (mixed metals, glass & mixed plastics)

Note: 2015/177/1 refers to a construction certificate

1.5 Related Development

The existing MRF was approved by the Joint Regional Planning Panel in 2016 (DA 2015/177) for the use of the site as a 'waste management facility'. The approval provides for an annual processing capacity of 30,000 tonnes per annum (tpa) of paper and cardboard and 69,900 tpa of commingled recyclables comprising mixed paper and cardboard, mixed metals (steel, tin and aluminium), glass and mixed plastics. The consent has been modified three times to enable changes to the site layout, installation of noise mitigation measures, and a temporary increase in processing capacity in response to a fire at Re.Cycle's Hume MRF.

Re.Cycle is currently progressing a modification application with Council to make alterations and additions to the site layout including:

- extending the footprint of Building 3 east to the Site boundary
- new enclosed overhead conveyor extending allowing paper and cardboard to be efficiently transferred from Building 2 to Building 3
- installation of new paper polishing equipment in Building 3 to achieve high levels of contaminant removal required for export
- a new awning attached to the MRF receival hall (Building 2) and Building 1, to provide short term weather protection for overflow materials
- revised car parking layout.

The modification application does not seek changes to the approved processing capacity.

It is intended that DA 2015/177, as modified, would be integrated with the new SSD consent, subject

1.6 EIS Purpose and Structure

This EIS has been prepared by EME Advisory on behalf of Re.Cycle (the applicant) to provide an assessment of the environmental, social and economic impacts of the Project and identify measures to manage and mitigate impacts where required. It is intended to assist the community, Council, State government agencies and the consent authority to gain a clear understanding of the Project and its impacts, so they can make informed submissions or decisions on the merits of the Project.

The EIS has been prepared to address the requirements of section 4.12(8) of the EP&A Act, sections 190 and 192 of Division 5 of the *Environmental Planning and Assessment Regulation 2021* (EP&A Regulation) and the Project specific SEARs, issued on 15 October 2025 (Ref: SSD-94439711).

The EIS is structured to reflect the general form and content requirements set out in the Department's *State Significant Development Guidelines - Preparing an Environmental Impact Statement* (DPE 2021), as follows:

- **Summary:** Summarises the findings of the EIS in a way that is easy to read and understand by the general public.
- **Chapter 1 – Introduction:** Provides a general overview of the Project and its objectives, identifies the applicant and provides a summary of the site history;
- **Chapter 2 – Strategic Context:** Provides a description of the features of the Project site and surrounds that may be impacted by the Project, considers the strategic policy context of the Project, outlines feasible alternatives considered and considers the suitability of the site;
- **Chapter 3 – Project Description:** Provides a detailed description of the Project for which approval is sought;
- **Chapter 4 – Statutory Context:** Provides the statutory context for the Project;
- **Chapter 5 – Community and Stakeholder Engagement:** Provides a summary of the findings of community engagement carried out during the preparation of the EIS and details further consultation that will be carried out if the Project is approved;
- **Chapter 6 – Assessment and Mitigation of Impacts:** Provides a summary of the findings of the assessment of the potential impacts of the Project and details proposed management and mitigation measures for the Project; and
- **Chapter 7 – Justification and Conclusion:** Provides a justification and overall evaluation of the Project,

having regard to the environmental, economic and social impacts of the Project and the principles of ecologically sustainable development (ESD).

The appendices accompanying the EIS include all relevant matters relating to the Project assessment, including detailed technical reports prepared by specialists, addressing key environmental issues associated with the Project. A table listing the project specific SEARs and where each of the SEARs has been addressed within the EIS is included in **Appendix A**.

The following supporting information is provided with the EIS:

- Appendix A – SEARs Table
- Appendix B – Approved Site Plan
- Appendix C – Community & Stakeholder Engagement Outcomes Report
- Appendix D – Air Quality Impact & Greenhouse Gas Assessment
- Appendix E – Noise & Vibration Impact Assessment
- Appendix F – Traffic Impact Assessment
- Appendix G – Fire and Incident Management Plan
- Appendix H – Preliminary Risk Screening
- Appendix I – Social Impact Assessment
- Appendix J – BDAR Wavier Acceptance

An Estimated Development Cost (EDC) is not provided as the Project can be accommodated within the existing approved site layout, built form and servicing and does not entail any capital investment.

2 Strategic Context

This chapter describes the key features of the site and surrounding area and outlines the strategic policy context for the Project. It identifies the need for the Project and provides an analysis of feasible alternatives considered and the suitability of the site for the Project.

2.1 Key Features of the Site and Surrounds

2.1.1 Site Description, Location and Context

The site is located at 40-42 Madeline Street, Strathfield South, approximately 12 kilometres (km) west of the Sydney Central Business District (CBD), in the Strathfield LGA. The site comprises an irregular shaped parcel of land being Lot 24 in Deposited Plan (DP) 1200563, with a total area of approximately 19,000m² (refer to **Figure 2-1**).

The site is situated on the eastern side of Madeline Street in an established industrial area and is surrounded by various industrial land uses. Directly to the north of the site, there is a civil construction depot (i.e. Shamrock Developments International) and a multi-unit industrial building. A concrete batching plant (operated by Hanson) is located approximately 170 m to the northeast. Adjoining land to the south is occupied by a waste transfer station (i.e. Aussie Skips) and a 4WD/heavy vehicle mechanical repair business (i.e. Pro-Axle Australia). Vacant undeveloped land adjoins the site to the east, while on the western side of Madeline Street, there is a transport and logistics facility (i.e. K&S Freighters) and a smallgoods food provider (i.e. Kaczanowski & Co) with the Enfield Intermodal Logistics Centre located further to the west.

There are low-density residential areas and public recreation areas further to the north, south and east. The nearest residential property is located approximately 70 m to the south-east of the site at No. 2 Chisholm Street. The nearest public space is Cooke Park, located approximately 100 m to the south of the site. Cooke Park is one of Strathfield's largest and most popular parks and provides a wide range of sporting and recreational facilities, including sportsgrounds, a skate park and a children's playground.

The Cooks River flows in a concrete-lined channel approximately 65 m to the north-east of the site and Cocks Creek, which feeds into the Cooks River, flows in a concrete-lined channel approximately 50 m to the south of the site. There is an unformed portion of Chisholm Street located directly to the east of the site, which is owned by Council.

Figure 2-2 shows the location of the site in its local context.

The site includes three large industrial buildings, with a number of smaller ancillary structures including four small office/amenities buildings, external storage bunkers, two weighbridges and an electricity substation. The site has three vehicular access points from the adjoining Madeline Street. The northern and southern entry driveways provide access for staff and truck access to the weighbridges and material loading/unloading areas, while the middle entry gate is normally closed.

The site is fully cleared of all native vegetation. All external areas within the site are concrete hardstand, with the exception of a narrow, landscaped strip along the Madeline Street frontage.

An aerial image of the site is provided in **Figure 2-3**.

Figure 2-1: Copy of Deposited Plan 1200563

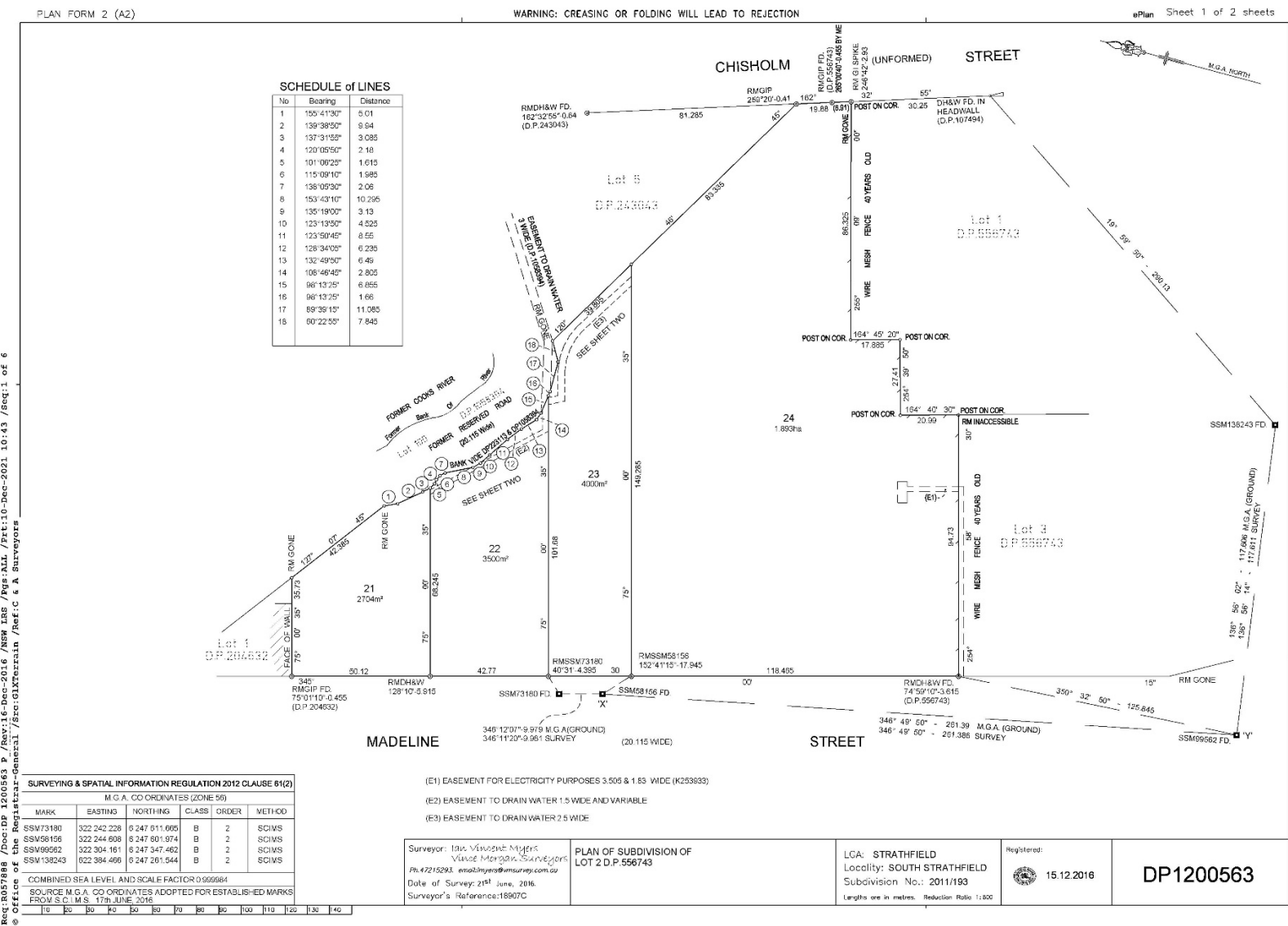


Figure 2-2: Site Location - Local Context



Figure 2-3: Aerial Image of the Site



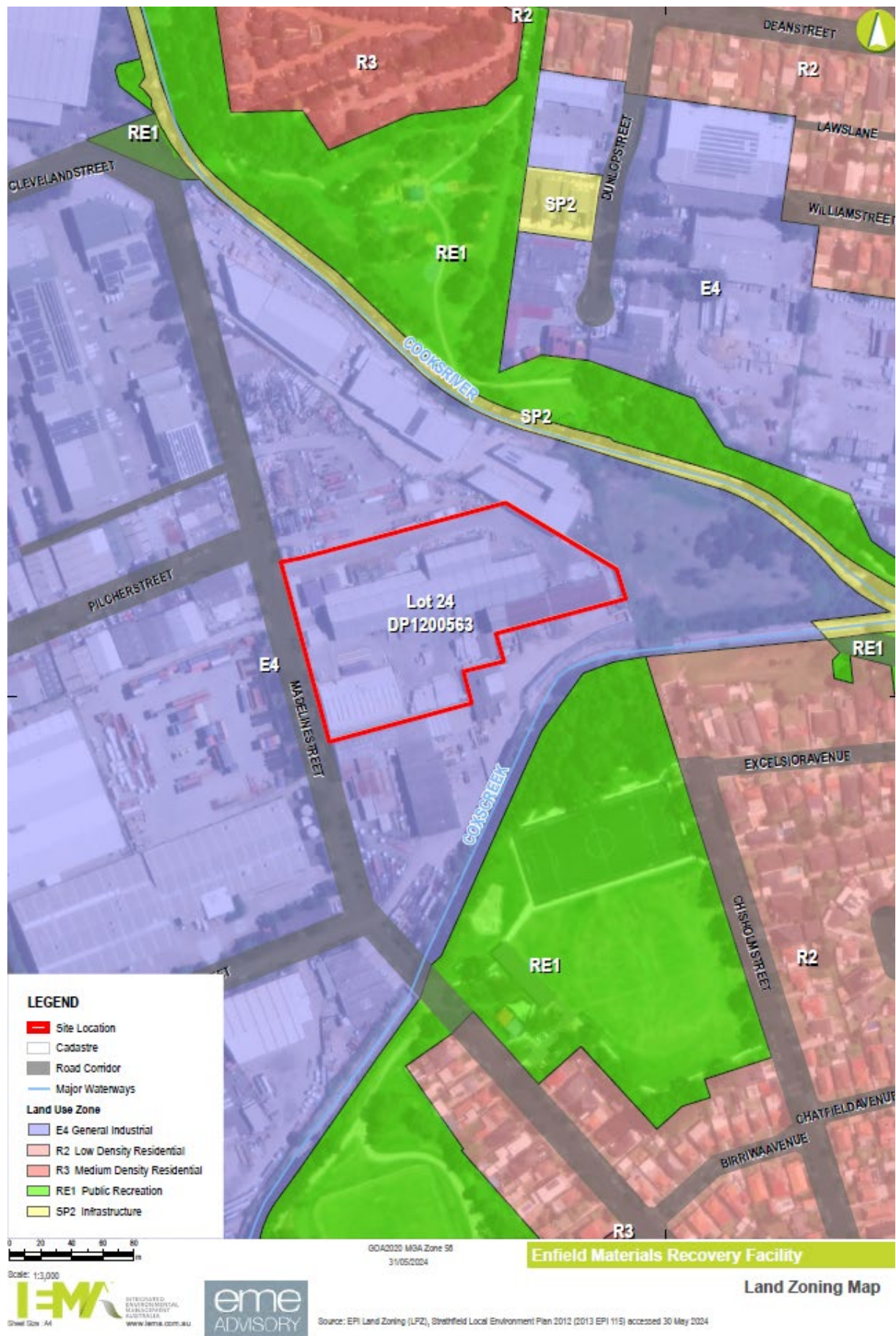
2.1.2 Zoning

The site is zoned E4 - General Industrial under the provisions of the *Strathfield Local Environmental Plan 2012* (Strathfield LEP), as shown in **Figure 2-4**. The objectives of the E4 - General Industrial zone are as follows:

- To provide a range of industrial, warehouse, logistics and related land uses;
- To ensure the efficient and viable use of land for industrial uses;
- To minimise any adverse effect of industry on other land uses;
- To encourage employment opportunities;
- To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers;
- To minimise fragmentation of valuable industrial land and provide large sites for integrated and large floorplate activities;
- To allow for a higher proportion of ancillary office floor space to support high technology, light industrial and small-scale warehouse-related land uses.

All land adjoining the site is also zoned E4 - General Industrial. Public recreation zoned land and low-density residential zones are located further to the east and south of the site. Cooks River is zoned as SP2 - Infrastructure, purposed for stormwater management.

Figure 2-4: Land Zoning Map



2.1.3 Land Ownership

LC Investment is the owner of the land on which the MRF is located. Landowner's consent will be provided with the development application.

Re.Cycle Operations Pty Ltd (Re.Cycle) is the registered owner of the MRF. Re.Cycle is a legal entity of the parent company Re.Group Pty Limited (owned by Re.Hold Pty Ltd) which operates one of the largest networks of recycling facilities across Australia (refer to **Section 1.2**). Polytrade Operations Pty Ltd owned and operated the MRF previously, before being acquired by Re.Group on 1 July 2022.

2.1.4 Existing Approved Development

Under DA 2015/177, the site currently manages the following waste streams:

- Paper and cardboard;
- Mixed metals (steel, tin and aluminium);
- Glass; and
- Mixed plastics.

The target material recovery rate is 99% for paper and cardboard (PCR), and approximately 90% for the mixed metals, glass, mixed paper, and mixed plastics.

The MRF process involves the receipt of commingled recycling from kerbside and commercial recycling collections, which are cleaned, sorted into material groups, sized and baled ready for transport off-site and subsequent processing and manufacturing into recycled packaging and other products.

The current approved site layout comprises three main industrial buildings. The approved use of each of these buildings is detailed in **Table 2-1**.

Table 2-1: Existing Approved Uses at the Site

Building No.	Approved Activity (DA 2015/177/2)
Building 1	MRF – glass beneficiation plant
Building 2	MRF – main mixed-recyclables processing line
Building 3	Paper and cardboard recycling plant and storage

Additional approved buildings and site infrastructure include:

- Four office/amenities buildings utilised by Re.Cycle personnel;
- Two weighbridges;
- Several external storage bunkers;
- Three site access driveways from the adjoining Madeline Street; and
- Car parking areas.

Figure 3-1 shows the existing approved site layout, including the site alterations and additions approved under Modification Application DA 2015/177/2.

Trucks enter the site from Madeline Street, via the main access driveway at the north-west corner of the property. They travel over a weighbridge and along the northern side of the site to the loading area at the rear of Building 1 and north entrance of Building 2. Trucks return by the same route, exiting via the weighbridge. Trucks are typically only on-site for a short period of time for loading and unloading activities. Site operations are supported by front end loaders and forklifts.

The existing facility operations vary depending on the recyclable waste stream. The approved hours of operation, along with restrictions imposed by the development consent in terms of traffic generation and roller door openings, are listed in **Table 2-2**.

Table 2-2: Approved Hours of Operation and Traffic Restrictions

Waste Stream	Activity	Hours of Operation	Consent Restrictions
Paper and cardboard	Receipt, processing and dispatch	Monday to Saturday, 6am to 10pm	Max. 33 incoming heavy vehicles per day. Max. 5 collection/dispatch heavy vehicles per day. Roller doors to be closed from 6pm and only opened when required for deliveries.
Mixed metals, glass, mixed paper, and mixed plastics	Receipt	Monday to Saturday, 5am to 3pm Note: first delivery permitted from 4.30am; however, machinery only permitted to be turned on at 5am.	Max. 45 incoming heavy vehicles per day. Roller doors to be closed from 3pm.
	Processing	Monday to Saturday, 5am to 10pm	-
	Dispatch	Monday to Saturday, 5am to 6pm	Max. 9 collection/dispatch heavy vehicles per day.
	Maintenance	Monday to Sunday, 10pm to 5am	All doors must be closed during facility cleaning and maintenance.

DA 2015/177/3 provides for extended operating hours associated with the temporary approval for increased waste receipt and processing in response to fire damage to Re.Group's Hume MRF. The temporary period extends to 30 June 2027 after which the operating hours revert to the hours indicated in Table 2-2. The temporary operating hours are shown in **Table 2-3**.

Table 2-3: Operating hours associated with DA 2015/177/3 temporary operations

Waste Stream	Activity	Hours of Operation	Consent Restrictions
Paper and Cardboard	Receipt, processing and dispatch	Monday to Saturday, 6am to 10pm	Maximum of 33 incoming heavy vehicles per day. Maximum of 5 collection (dispatch) heavy vehicles per day. Roller doors to be closed from 6pm and only opened when required for deliveries.

Waste Stream	Activity	Hours of Operation	Consent Restrictions
	CLOSED	10pm to 6am Monday to Saturday and closed all day Sunday.	
Mixed metals, glass and mixed plastics	Receipt	Monday – Saturday 5am to 6pm Note: first delivery permitted from 4:30am however processing machinery only permitted to be turned on at 5am. Sunday 8am-6pm	Maximum of (65) incoming vehicles per day Roller doors to be closed from 6pm
	Processing	Monday to Saturday, 5am to 10pm Sunday 8am-6pm	-
	Dispatch	Monday to Saturday, 5am to 6pm Sunday 8am-6pm	Maximum of twelve (12) collection vehicles per day
	Maintenance	Monday to Sunday, 10pm to 5am 10pm Saturday until 6pm Sunday	

2.2 Strategic Policy Justification

This section addresses the Project's consistency with relevant Government strategies, policies and plans.

2.2.1 Recycling and Waste Reduction Act 2020

To encourage the development of a circular economy, the Council of Australian Governments (COAG) - now National Cabinet - imposed a ban of the export of unprocessed waste glass, plastics, paper/cardboard and tyres through the *Recycling and Waste Reduction Act 2020*, which regulates how we export those types of waste. As a result, the materials recovery sector is under pressure to improve sorting standards, so that secondary processors can remanufacture locally acquired materials, either for reuse domestically or for export under the new standards.

The Project is critical to realising the Federal government's objective for domestic processing of recyclable materials, as targeted by the ban, by increasing the quantity of mixed recyclables such as glass, paper and cardboard and plastics.

2.2.2 National Waste Policy: Less Waste, More Resources 2018

The *National Waste Policy: Less Waste, More Resources 2018* (Australian Government, 2018) (the National Waste Policy) provides a national framework for waste management, recycling and resource recovery in Australia to 2030. The policy outlines roles and responsibilities for collective action by businesses, governments, communities and individuals. It identifies five overarching principles underpinning waste management in a circular economy.

These include:

1. Avoid waste
2. Improve resource recovery
3. Increase use of recycled material and build demand and markets for recycled products
4. Better manage material flows to benefit human health, the environment and the economy
5. Improve information to support innovation, guide investment and enable informed consumer decisions.

The Project supports the first four principles of the Policy. Increasing the processing of the comingled waste stream increases the amount of material such as glass, paper and cardboard and plastics being diverted from landfill and therefore supports improved resource recovery and avoidance of waste. In addition, the Project will enable Re.Cycle to better manage material flows, ensuring continuity in the recovery of co-mingled recyclables and mitigating the risk of stockpiling, which directly supports the fourth principle of the Policy.

The policy is implemented through the 2024 National Waste Policy Action Plan (NWPAP) (originally the 2019 Plan) which includes targets and priorities to guide investment and efforts to 2030. These targets and actions are designed to guide Australia's investment and national efforts for waste management to 2030 and beyond. The targets include:

1. Ban the export of waste glass, plastic, paper and tyres
2. Reduce the total waste generated in Australia by 10% per person by 2030
3. 80% average recovery rate from all waste streams following the waste hierarchy by 2030
4. Significantly increase the use of recycled content by governments and industry
5. Phase out problematic and unnecessary plastics by 2025
6. Halve the amount of organic waste sent to landfill by 2030
7. Make comprehensive, economy-wide and timely data publicly available to support better consumer, investment and policy decisions.

The NWPAP complements and supports the implementation of better waste management and circular economy plans by State and territory governments, local government, business and industry.

The Project aims to make optimal use of the existing processing infrastructure at the site to meet the increasing domestic market demand for the recycling of co-mingled waste streams such as glass, paper and cardboard and plastics and ensure the continued recovery of recyclables that would otherwise be disposed of to landfill. This directly supports the first, third, and fourth targets outlined above.

By addressing these targets, the Project will contribute positively to both environmental sustainability and waste management and resource recovery targets of the Australian government.

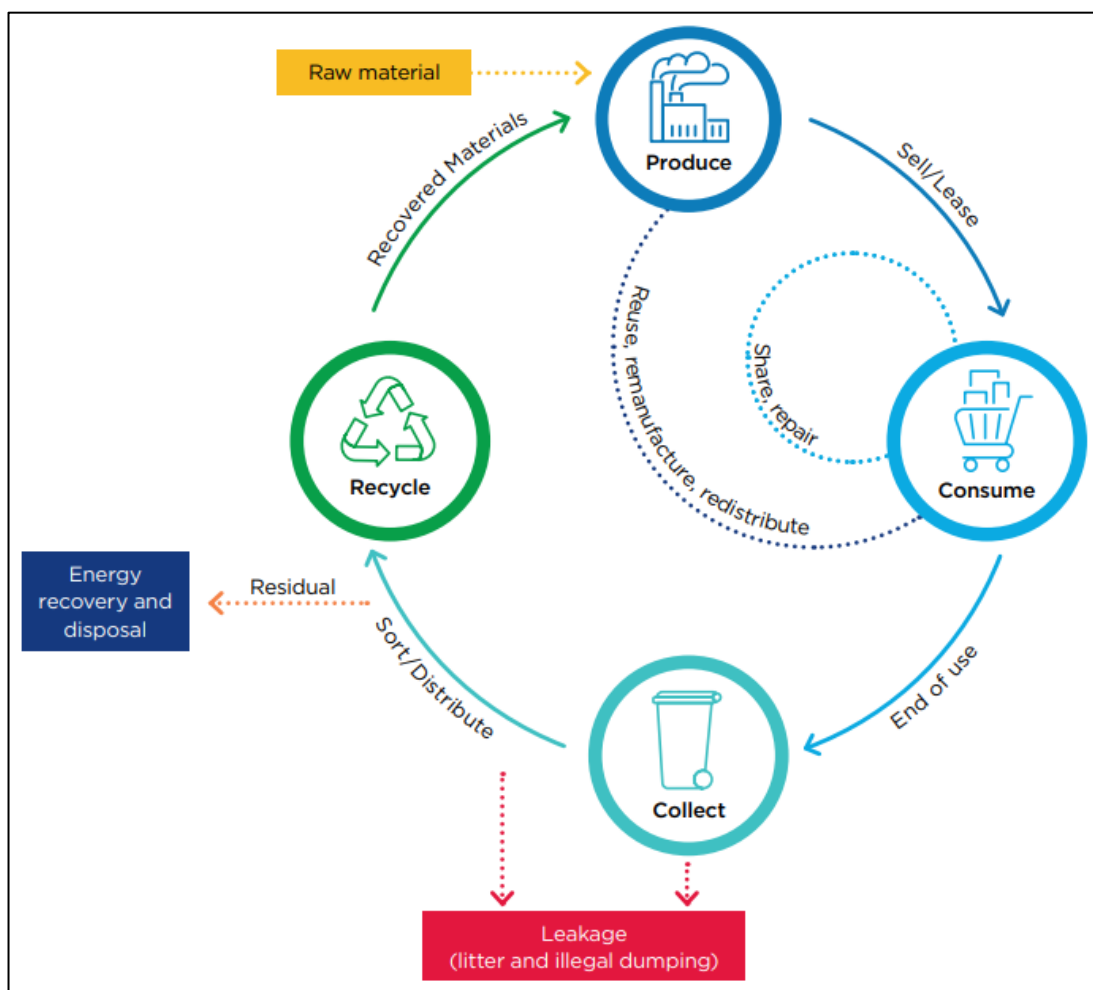
2.2.3 NSW Waste and Sustainable Materials Strategy 2041

In accordance with the *NSW Waste Avoidance and Resource Recovery Act 2001*, the NSW Government is committed to refreshing and updating its waste strategy every five years – to review and continually improve the State's policies and targets for waste reduction and landfill diversion. The *NSW Waste and Sustainable Materials Strategy 2041 (Stage 1: 2021-2027)* (DPIE, 2021) (Waste Strategy) updates the previous *Waste Avoidance and Resource Recovery Strategy 2014–2021* (EPA, 2014) and commits to the NWPAP targets identified in **Section 2.2.2**.

The Waste Strategy identifies the importance of implementing a circular economy for waste, which aims to

eliminate waste and reduce the continual use of new resources. The circular economy aims to keep products, equipment and infrastructure in use for longer, thus improving the productivity of these resources, in contrast to the traditional linear economy, which has a 'take, make, dispose' model of production (refer to **Figure 2-5**).

Figure 2-5: Circular Economy



Source: NSW Waste and Sustainable Materials Strategy 2041 (DPIE, 2021)

The Waste Strategy outlines the actions the NSW Government will take over the next six years – the first phase of the Strategy - to move towards a circular economy and sets out the following three focus areas:

- Meeting our future infrastructure and service needs;
- Reducing carbon emissions through better waste and materials management; and
- Building on our work to protect the environment and human health from waste pollution.

To complement the Waste Strategy, the former DPIE also released the *NSW Waste and Sustainable Materials Strategy: A guide to future infrastructure needs* (DPIE, 2021) which identifies the waste and circular economy infrastructure needs required to meet demand over the next decade and beyond.

The Guide identifies the need for additional investment in waste and resource recovery infrastructure to meet demand by 2030, including investment in quality improvement upgrades to existing glass beneficiation facilities.

The Guide notes that the key markets for recycled glass are to replace virgin material in the manufacture of new bottles and to replace virgin sand for civil construction purposes and that demand is increasing:

“While demand for recycled glass has been low in recent years, the market is picking up through investments in glass processing capabilities and growing support for the use of recycled crushed glass as a sand substitute. Demand is anticipated to continue to grow, given the announcement by Visy (which runs NSW’s only glass bottle manufacturing facility), that it would aim to increase the recycled content of its glass bottles from one-third to two thirds.”

Demand for additional glass beneficiation will also increase in response to the ban on export of unprocessed waste glass, plastics, paper/cardboard and tyres (refer to **Section 2.2.1**) and the increased recycling of beverage containers in response to the Return and Earn Container Deposit Scheme.

The Project will assist the NSW Government to meet its waste management targets by providing an additional 100,100 tpa of co-mingled recyclables throughput to meet the increasing demand and support the development of a circular economy.

2.2.4 NSW Waste and Circular Infrastructure Plan 2025

Chapter 1 of the NSW Waste and Circulate Infrastructure Plan (EPA, September 2025) was published in September 2025 to outline the NSW Government’s response to declining landfill capacity in the Sydney region. The Plan outlines whole-of-government actions to facilitate private investment in waste infrastructure and avoid the Greater Sydney waste crisis by, among other initiatives, strengthening how we plan for waste infrastructure to meet the needs of Greater Sydney’s growing population. Further chapters of the Plan are under development, with a focus on enabling higher order recovery, recycling and reuse.

The Project supports the directions of the Plan by investing in increased resource recovery capacity for co-mingled waste streams and contributing to the diversion of waste from scarce landfill capacity.

2.2.5 Greater Sydney Region Plan: A Metropolis of Three Cities

The *Greater Sydney Region Plan: A Metropolis of Three Cities* (Greater Sydney Commission (GSC), 2018) (the Region Plan) provides the basis for strategic planning for the Greater Sydney region by setting out a 40-year vision and establishing a 20-year plan to manage growth and change. It also provides direction for the formation of district and local plans.

The Region Plan establishes 10 directions supported by 40 objectives that outline the framework for the city’s liveability, productivity and sustainability. Direction 9, being ‘An Efficient City’, recognises the importance of responding to anticipated growth through strategic land use for the management of water, energy, resources and waste to reduce costs, carbon emissions and environmental impacts. Direction 9 is supported by three objectives, including ‘Objective 35: More waste is re-used and recycled to support the development of a circular economy’.

The plan identifies two strategies to achieve this objective, as follows:

- Strategy 35.1 – Protect existing, and identify new, locations for waste recycling and management; and
- Strategy 35.2 – Support innovative solutions to reduce the volume of waste and reduce waste transport requirements.

The Project is consistent with both these strategies as it will result in the more efficient use of an existing, centrally located material recovery facility. By maximising the amount of co-mingled waste that can be processed at the site the Project will contribute to a reduction in the overall amount of waste going to landfill, minimise unnecessary transportation and support the development of a circular economy. It would also enable a reduction in reliance on virgin materials by increasing the production of secondary raw materials, which would contribute to emissions reduction and energy conservation.

The Project is therefore consistent with the relevant directions and objectives of the Region Plan.

2.2.6 Our Greater Sydney 2056: Eastern City District Plan

The Region Plan sets the planning framework for the following five districts that make up the Sydney region:

- Central City;
- Eastern City;
- North District;
- South District; and
- Western City.

The Project site is situated with the Eastern City district.

The *Eastern City District Plan* (GSC, 2018b) (the District Plan) sets out the planning priorities and actions for improving the quality of life for residents in the Eastern City District. Planning priorities relevant to the Project include:

- Planning Priority E12 – Retaining and managing industrial and urban services land; and
- Planning Priority E19 – Reducing carbon emissions and managing energy, water and waste efficiently.

Planning Priority E12 recognises the importance of safeguarding all existing industrial and urban services land from competing pressures, especially residential and mixed-use zones. This land should be retained for economic activities required for Greater Sydney's operation, such as urban services (e.g. waste management and recycling facilities), in order to support population growth.

The Project will retain existing industrial land for an urban service (i.e. waste management and recycling) that will serve the future needs of the local community and Eastern City District and provide additional employment opportunities for the surrounding area.

Planning Priority E19 identifies the need for a reduction in carbon emissions and the efficient management of energy, water, and waste. The diminishing capacity of existing landfill sites in Sydney has resulted in more waste being sent to landfill outside the region, at greater cost to the community. The District Plan cites the need for additional sites for waste management in Greater Sydney to improve efficiencies in managing waste.

Two specific actions related to waste management are identified under this Planning Priority:

- Action 70 - Protect existing and identify new locations for waste recycling and management; and
- Action 71 - Support innovative solutions to reduce the volume of waste and reduce waste transport requirements.

The project supports both of these actions by increasing the capacity of an existing waste recycling facility and reducing the volume of waste that would otherwise be transported to landfill.

2.2.7 Future Transport Strategy 2056

The Future Transport Strategy 2056 (TfNSW, March 2018) includes a Greater Sydney Services and Infrastructure that will deliver 12 customer outcomes aligned to the Future Transport outcomes. These outcomes emphasise technology innovations to support better transport, balancing the need for access with the liveability of places, and making the best use of available assets and resources, among others.

The Project supports these outcomes by utilising existing waste infrastructure that is well serviced by the nearby road network to further increase resource recovery and diversion from landfill. By using established and approved

access routes to the site, the Project will continue to minimise traffic related impacts on nearby residential streets.

2.2.8 Strathfield 2040: Local Strategic Planning Statement

The *Strathfield 2040 - Local Strategic Planning Statement* (LSPS) (Strathfield Council, 2020) outlines Council's long-term vision for land use, development and infrastructure provision within the LGA, giving effect to the more broadly established directions set out in the Region Plan and District Plan.

Several key district level planning priorities identified in the LSPS and relevant to the Project include:

- P3: Freight corridors and local servicing meets needs with minimal impact on neighbourhoods and centres;
- P10: Industrial land and precincts deliver District and local urban services and provide activated spaces with minimal impact on neighbourhoods;
- P16: A healthy built environment delivers sustainable and resource efficient outcomes; and
- A106: Investigate appropriate locations for recycling centres and waste drop-off points.

The Project supports the relevant planning priorities and actions of the LSPS by increasing the co-mingled waste throughput at the existing resource recovery facility in an already developed industrial area that houses other waste and recycling facilities, without any significant changes to operating hours or additional impacts on surrounding neighbourhoods.

2.3 Project Need

By increase recycling and resource recovery, the Project supports the resource recovery sector's response to Government objectives to increase recycling and resource recovery levels, increase the diversion of waste from landfill, keep materials circulating in the economy for longer, and meets community's growing appetite and desire to implement more sustainable practices, including recycling.

The Project need is driven by a combination of:

- Making use of underutilised processing capacity including for material processing
- Increasing market demand for recycled products such as glass and metals
- The growth in the availability of glass for recycling due to the Return and Earn Container Deposit Scheme
- Contributing to a circular economy – the Project involves the processing of co-mingled recycling, supporting the industry's transition to a circular economy, keeping products and materials in use, minimising materials going to landfill and promoting the continual reuse of resources.

2.4 Cumulative Impacts

An assessment of whether the Project is likely to generate cumulative impacts with other development in the area has been undertaken in accordance with the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPIE 2021).

A search of the DPHI Major Projects database was undertaken on 30 January 2025 to identify other SSD and State Significant Infrastructure (SSI) projects within the vicinity of the site that may be relevant to the cumulative impact assessment. To be considered relevant, nearby projects needed to be of similar size, within reasonable proximity and have a timeframe that may overlap with the Project.

Approved and likely future developments which were considered in the cumulative impact assessment of the Project are summarised in **Table 2-4** and discussed further below.

Table 2-4: Relevant Projects for Cumulative Assessment

Project Name	Address	Description	Status	Distance from Project
Aussie Skips Recycling Bellfrog Street Site Upgrades SSD-67497708	13 Bellfrog Street, Greenacre	To increase the capacity of the Bellfrog Street site to receive and process up to 250,000 tonnes of general solid waste per annum	Response to Submissions	1.2 kms south west
MP05_0147-Mod-15 SSI Modification	127 Cosgrove Road, Strathfield South	Re-use Tarpaulin Factory as a Garden Centre	Approved 22/11/2023	850 m south

Aussie Skips Recycling Bellfrog Street

A Scoping Report was submitted to DPHI in January 2024 requesting SEARs for a proposed development to increase the capacity of the Bellfrog Street site to receive and process up to 250,000 tonnes of general solid waste per annum. The project is currently at Response to Submissions stage (as of 30 January 2025).

Target waste streams are soils and source segregated building and demolition waste. Waste materials would be processed by sifting, picking, blending (pugmill) and screening (trommel screen).

Given the distance between the sites, the potential for cumulative impacts is likely to relate to traffic movements. The EIS notes the roads used to access the site are Roberts Road, Wentworth Street and Bellfrog Street. Access to the Madeline Street site is primarily via Punchbowl Road, Cosgrove Road and Madeline Street. Therefore, the two developments are unlikely to use the same road network until vehicles reach the main arterial network, reducing the potential for cumulative impacts.

Proposed Garden Centre

MP05_0147 is an approved development for a garden and retail centre on the corner of Punchbowl Road and Cosgrove Road. The development, when operational, will utilise the Punchbowl Road / Cosgrove Road and Liverpool Road / Cosgrove Road intersections. A review of the TIA report submitted with the SSI modification application found that these key intersections will continue to operate at an acceptable LoS. In addition, DPHI's assessment report states that "the proposed modification will have minor impacts on the surrounding street traffic network".

Where relevant, cumulative impacts, are addressed further in **Chapter 6** of the EIS.

2.5 Alternatives Considered

Consideration was given to alternative approaches as part of the design development process for the Project. Each of these alternatives have been discarded as they would not adequately address the critical need for enhanced resource recovery throughput at the site.

- **A 'Do nothing' scenario:** this scenario was rejected as it would not increase the resource recovery throughput of the existing operations. This would be inconsistent with the objectives and goals mandated in local, state, and national strategic planning frameworks. Further, a \$5 million Waste Less Recycle More grant was awarded to develop the facility, with the objective of processing at minimum, 69,900tpa of

glass. A 'do nothing' scenario would go against the objective of the grant.

- **Alternative site:** The Project site is situated in close proximity to key regional transport infrastructure and is of appropriate zoning for an industrial use and is already processing a significant quantity of co-mingled recyclables. The Project site is therefore considered the optimal location for the Project, with the result that alternate sites have not been considered. An alternative to the Project would be developing a new facility on a greenfield site, potentially on the fringe of the Sydney Growth Centres, which would result in greater impact for the natural environment, significant unnecessary costs, and other risks related to new developments. The Site is better placed geographically to service central Sydney customers and would yield the benefit of being in an urban area in which most waste is produced.
- **Alternative site configuration and layout:** As the site is fully developed with existing infrastructure and building capacity to process the increased throughput, an alternative site layout was not considered further.

Based on the above factors, the Project, as detailed in **Chapter 3** is considered to be the most suitable option.

2.6 Site Suitability

The Project makes use of existing infrastructure and underutilised capacity to increase the recycling of co-mingled waste including glass. The site is well serviced by roads with nearby intersections operating at the highest level of service. Its central location between the Western Sydney and Greater Sydney area, making it available to a large market, means it is well placed to service the needs of businesses and communities.

Re.Cycle has progressively upgraded noise mitigation measures to minimise the impact on residential areas in the locality.

The site has sufficient space to accommodate additional traffic movements and avoid queuing onto the public road as well as sufficient storage capacity.

Establishing equivalent resource recovery capacity at another site would likely involve locating outside the Sydney Region with increased travel distances and costs to waste markets.

3 Project Description

This chapter provides a detailed description of the Project for which approval is sought. As there are no changes to site infrastructure and layout, and no construction works, the focus of the chapter is on the increased throughput and processing of materials.

3.1 Project Overview

Re.Cycle is seeking a new development consent to:

- Increase the throughput of co-mingled recyclables at the existing MRF by an additional 100,100 tpa;
- Increase the quantity of waste that can be stored at any one time from 4,200 t to 8,000 t; and
- Extend the existing approved hours of operation to allow the additional materials to be received at the MRF from 4.30am to 6pm, Monday to Saturday (reception is currently limited to 4.30am to 3pm).

The additional material throughput will be processed through the existing approved facility; no additional buildings, plant or equipment or changes to the site layout will be required. If approved, the Project will increase the total throughput for all materials received and processed at the site from the currently approved 99,900 tpa to 200,000 tpa.

The Project represents an intensification of operations utilising existing buildings, infrastructure and site layout. Other than the additional material throughput, the Project will not involve any significant changes to the existing approved operations, site layout or built form. Notably:

- There will not be any changes to the existing approved throughputs and processing activities for the PCR. The Project will only increase the throughput for the MRF to enable an increase in co-mingled recycling, including glass;
- There will not be any construction works or any additional buildings, plant or equipment, required to accommodate the additional waste processing throughput of the existing facility;
- While there will be an increase in traffic generation, there will not be any changes to the existing approved site access arrangements, on-site traffic circulation or external transportation routes currently used by trucks/vehicles to access the site;
- There will be a minor change to the existing approved hours of operation to allow the additional material to be received at the MRF from 4.30am to 6pm, Monday to Saturday (reception is currently limited to 4.30am to 3pm);
- There will not be any change to existing off-street carparking requirements or arrangements. The existing approved carparking provision is sufficient to accommodate the car parking needs of the Project; and
- There will not be any changes to existing customer/visitor access arrangements.

A summary of the overall Project is provided in **Table 3-1**.

Table 3-1: Project Summary

Project Element	Summary of the Project
Co-mingled recycling	The Project does not propose to alter the existing recycling processes for co-mingled waste, other than to increase the throughput by an additional 100,100 tpa (refer to Section 3.2). The existing facility has sufficient storage capacity, and

Project Element	Summary of the Project
	processing capacity, including for glass processing, to accommodate the additional throughput.
Site Infrastructure & Layout	No changes to the existing approved site layout are proposed (refer to Figure 3-1). No additional buildings, plant or equipment are proposed (refer to Section 3.4).
Traffic, Access & Car Parking	No changes to the existing site access arrangements are proposed (refer to Section 3.5). The Project will generate the following <i>additional</i> daily traffic: ▪ up to 58 additional truck trips delivering materials to the site (29 in, 29 out); ▪ Up to 13 additional truck trips despatching materials from the site (7 in, 6 out); and ▪ Up to 12 light vehicle trips for 6 additional employees (6 in, 6 out) (6 additional staff over two shifts (3 per shift)). The Project will not result in any change to existing on-site car parking requirements or arrangements. The current car parking provision is sufficient to accommodate the Project (refer to Section 3.5).
Hours of Operation	The Project proposes a slight variation to the existing approved hours of operation to allow the additional material to be received at the MRF from 4.30am to 6pm, Monday to Saturday (receiving is currently limited to 4.30am to 3pm). All other activities associated with the additional co-mingled recycling will be undertaken within the hours currently imposed by Development Consent DA 2015/177/2 (refer to Section 3.7).
Employment	The Project will generate 6 additional full-time positions (i.e. 3 additional personnel per shift – refer to Section 3.8).
Estimated Development Cost (EDC)	N/A – The Project does not involve any capital works as no changes to the existing site layout or built form are proposed.

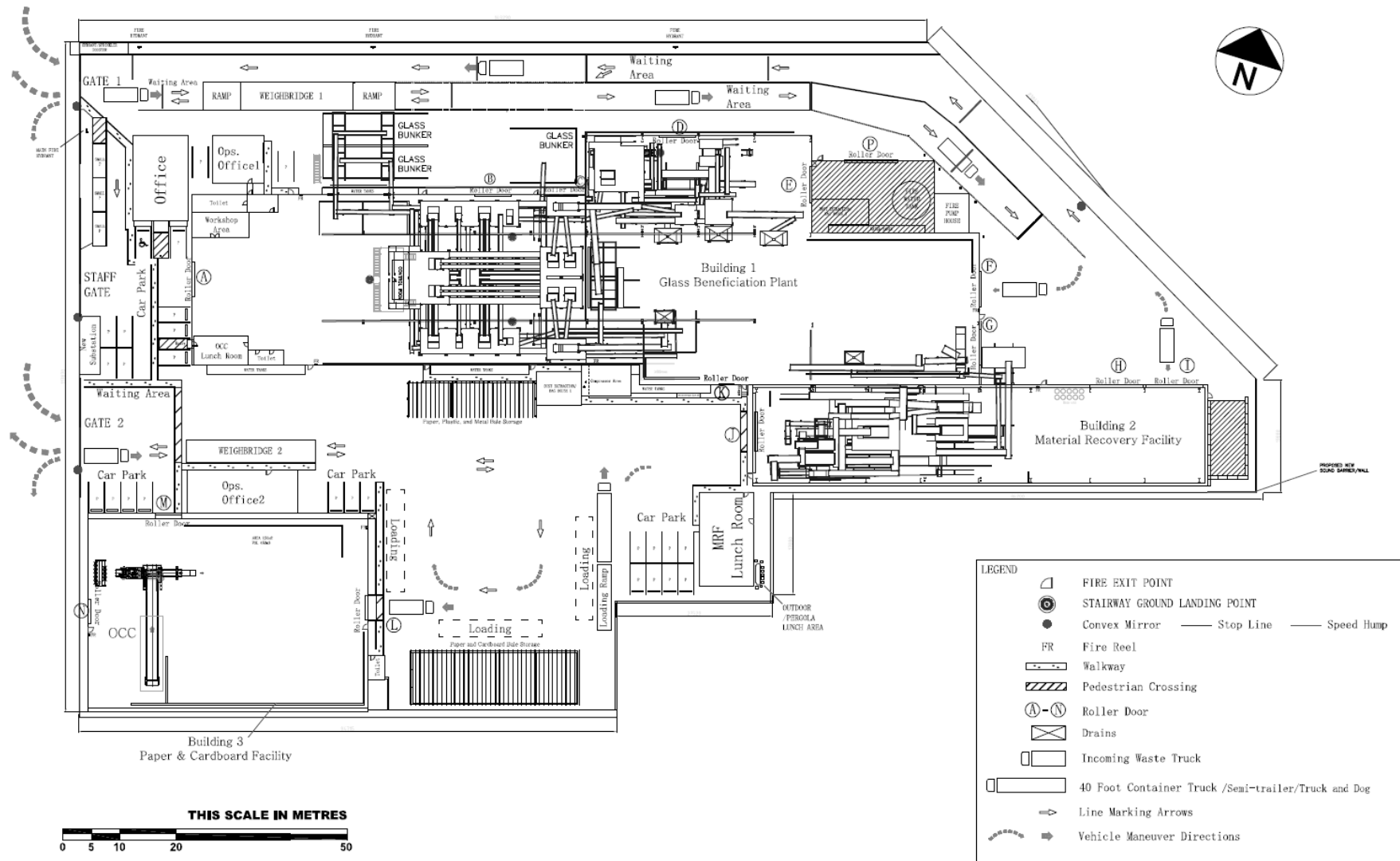
3.2 Existing Approved Site Layout

The site layout as approved by DA 2015/177 is shown in **Figure 3-1**. Key features of the site include:

- Building 1 MRF glass beneficiation plant in the northern part of the site;
- Building 2 MRF main mixed-recyclables processing line in the eastern part of the site;
- Building 3 Paper and cardboard recycling plant and storage in the south western part of the site;
- Office/amenities buildings utilised by Re.Cycle personnel located in the western part of the site;
- Three site access driveways from the adjoining Madeline Street:
 - Gate 1 in the northern part of the site used for MRF related trucks and staff access;
 - Gate 2 in the southern part of the site used for PCR related trucks and staff access;
 - Staff gate in the western part of the site adjacent to the office area which is normally closed;
- Two weighbridges adjacent to Gate 1 (Weighbridge 1) and Gate 2 (Weighbridge 2);
- Several external enclosed storage bunkers; and

- Car parking areas.

Figure 3-1: Approved Site Layout

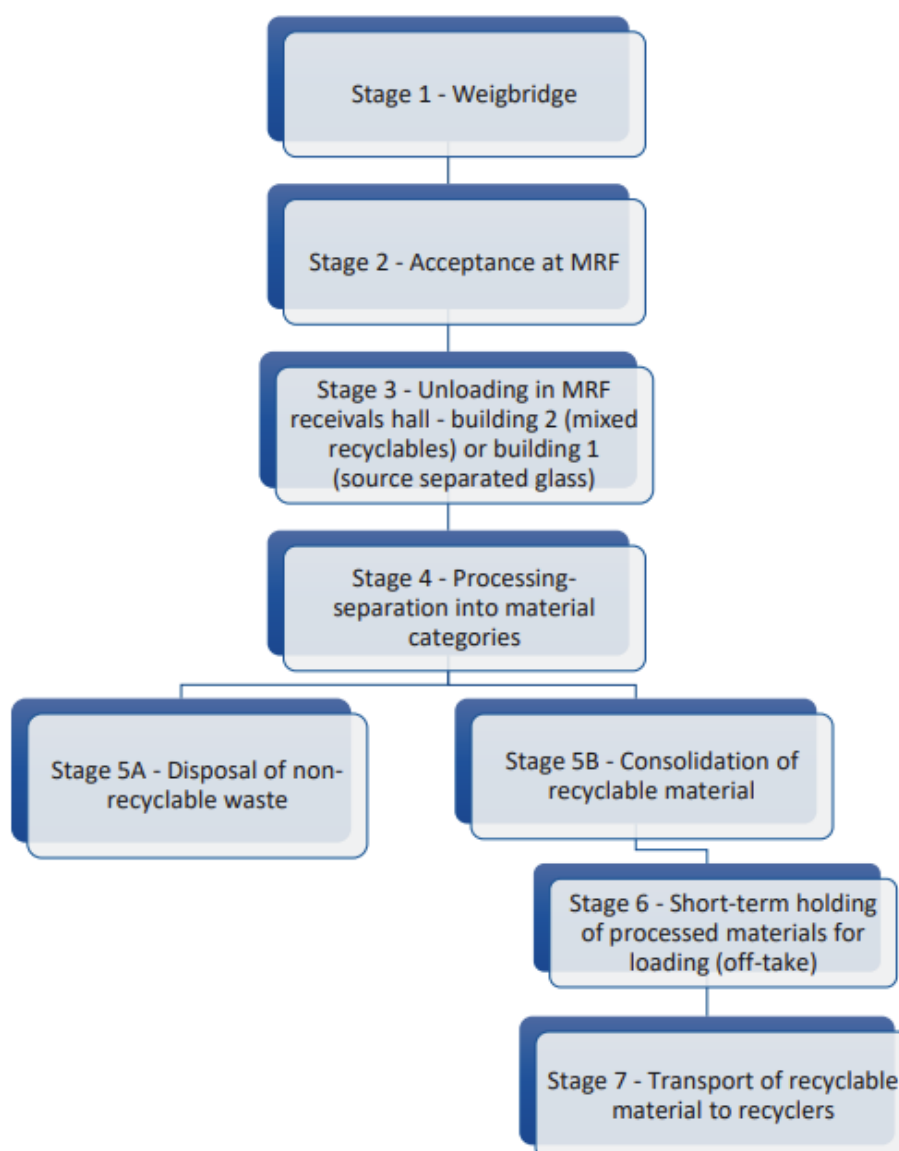


3.3 Existing Process for Co-mingled Waste

The Project does not propose to alter the existing approved operational processes at the MRF, other than to increase the throughput of co-mingled waste by an additional 100,100 tpa so that the total co-mingled waste stream would be 170,000 tpa.

The existing MRF process involves the receipt of commingled recycling, comprising mixed paper, mixed plastic, mixed metals, and glass from kerbside and commercial recycling collections, which are cleaned and sorted into material groups. These materials, with the exception of glass, are sized and baled ready for transport off-site and subsequent manufacturing into recycled packaging and other products. Glass is conveyed to the glass beneficiation plant (GBP) for further processing. An overview of the existing approved operational processes carried out at the MRF is provided in **Sections 3.3.3** below supported by a process flow diagram in **Figure 3-2**.

Figure 3-2 Glass Beneficiation Process Flow Chart



Material being processed at the MRF is sourced from Council kerbside collections (direct or via contractors) and other MRFs. The additional 100,100 tpa of co-mingled waste throughput will be sourced from the above sources, as well as Container Deposit Scheme (CDS) glass from various network operators and from Re.Group's expanding network of MRFs in NSW and the ACT.

3.3.1 Material Reveal

Vehicles carrying comingled recyclables currently enter the site from the adjoining Madeline Street via the main site access ('Gate 1') and pass over the weighbridge ('Weighbridge 1') to record tonnes received (refer to **Figure 3-1**).

The weighbridge operator is responsible for recording all details of the material accepted onto the Site and directing material streams to the correct section of the Site for processing. All drivers of trucks carrying incoming material are required to provide paperwork to confirm the composition of the load to ensure that only permitted material is received on Site.

The weighbridge operator records the following information:

- The origin, type and weight of waste delivered;
- The date the delivery was made;
- The registration number of the vehicle making the delivery; and
- The particulars of where on the Site the waste will be deposited (MRF or PCR as relevant)

If a non-conforming load is identified at this stage, the vehicle will be rejected and directed to an appropriate disposal facility. All relevant details (vehicle type, number, origin, reason for rejection) are recorded and maintained for use in reporting. The owner of the rejected incoming load will be informed of the incident and provided a reason for rejection of the load.

If non-conforming waste is identified during deposition of the waste on the tipping floor, the vehicle driver will be asked to immediately stop depositing the waste. The non-conforming waste will be reloaded into the same vehicle and the driver directed to transport the waste to an appropriate facility. In the event that the vehicle depositing the non-conforming waste has already left the building, the Site operator will segregate the non-conforming waste into a dedicated 'safe area' on the tipping room floor so that operational activities can continue while the customer responsible for the waste is notified and advised to remove the non-conforming waste. The front-end loader or excavator operator will assist the customer retrieving the non-conforming waste to reload the waste into the customer's vehicle for disposal at an appropriate facility

The weighbridge functions as the primary control method for ensuring that incoming waste comply with the quantity limits specified in the development consent. Weighbridge data is captured on the Smart Tech waste tracking system and forms the basis of the Waste Contribution Monthly Report to the EPA via the Waste and Resource Reporting Portal.

After being weighed, incoming trucks containing mixed recyclables drive to the rear of the site and discharge their load at the MRF Reveal Area within Building 2 (refer to **Figure 3-3**).

Figure 3-3: MRF Receiving Area

The MRF includes a series of conveyors that provide a constant and controlled flow of material through the system. Mixed recyclable material is sent through a series of trommel screens, an optical sorting system, an eddy current separator, overhead magnetic conveyor, and glass disc screen to separate material according to size and type (plastics, paper/cardboard, steel, aluminium, glass and residual contaminants for disposal). Non-recyclable contaminants are removed, baled and transported to a facility that is licensed to receive that waste.

Once separated, plastics, metal (aluminium and steel) and paper/cardboard are sent via conveyor to a separate baler to be baled. Once baled, recovered materials are transferred by forklift and stored in the enclosed material bunkers located on the southern side of Building 1 and adjacent to Building 3 before being loaded onto trucks and transferred to relevant destinations for further processing.

Glass outputs from the MRF are transferred via internal conveyors to the glass beneficiation facility in Building 1 for further processing and separation into different colour fractions. The MRF glass output is manually loaded into a hopper that is directly positioned on a vibratory feeder, which in turn feeds onto a conveyor. This conveyor then carries a controlled flow of the feed material to the next stage of the process.

Single-stream glass is sent directly to the glass beneficiation facility in Building 1. This includes glass from CDS collections or other independent collections of glass bottles. Inputs are deposited onto an intake stockpile on the floor of Building 1.

3.3.2 Glass Cleaning

Glass is then subject to a cleaning process to remove lids, labels and other contaminants. This process includes:

- Optical equipment to shoot out plastic and paper;

- An X-ray machine to shoot out ceramic, stone and porcelain (CSP);
- Magnets to pull ferrous metals; and
- Eddy currents to repel non-ferrous metals.

3.3.3 Processing and Sorting

Glass is then sorted by colour and size using advanced glass optical sorting technology. This system sorts the glass into three colour categories, being green, amber and flint and into two size categories, being large glass (8mm-50mm) and small glass (3mm-8 mm).

3.3.3.1 Step 1 – Crushing

The double roll crusher will reduce the size of the glass to a regular, consistent size. This enables more accurate separation and thus cleaner, higher quality products will be produced.

3.3.3.2 Step 2 –Screening

The material then passes over a screening machine to remove the fines from the glass fragments (any material <14mm). This fine material is carried via an enclosed conveyor to the fines bunker.

3.3.3.3 Step 3 –Separation

The >14mm material is transported to the next stage of the process where it is separated via density separation, removing materials that are lighter than glass. To reduce the exposure to dust, this separation unit is kept under negative pressure.

During the process, the light organic material moves through a rotary valve onto a conveyor belt and is carried into the specified bunker. A clean air stream is then recycled through the system, via a dust filter.

Glass and any other heavy residual materials not screened out by the separator fall to the bottom of the chamber and are transported to the next stage of the process via conveyors and bucket elevators.

3.3.3.4 Step 4 – Sorting Stage 1

The material then enters the first sorting unit via a vibratory feeder. The sorter separates the lead glass and glass ceramics and analyses the elemental composition of the glass fragments to detect the composition in relation to elements such as zinc, zirconium, strontium, and lead. These elements allow accurate separation of lead glass and ceramic glass.

The glass ceramics are ejected from the process and via a conveyor and deposited into the ceramics bunker. The lead glass fragments are then transferred via conveyor and bucket elevator to the next sorting steps to separate the glass fragments from any metal fragments remaining in the material.

3.3.3.5 Step 5 – Sorting Stage 2

The lead glass fragments then enter a second sorting unit via a vibratory feeder. The material enters the unit and falls under gravity down a glass slide. During their path down the glass slide, a camera detects any materials that are not glass (e.g. caps, stones, and ceramics), referred to as CSC. If any of these materials are detected, they will be ejected by air valves into a discharge chute.

The fragments of glass continue their regular trajectory from the bottom of the glass slide and fall onto a conveyor and are transported downstream. The CSC fragments fall onto a conveyor and are transported to their specific bunker.

3.3.3.6 Step 6 – Sorting Stages 3 & 4

A unique combination of separators is then used to separate the glass fragments (cullet) into their specific colour streams of amber, green, and flint (clear/opaque) (refer to **Figure 3-4**). Then, similar to the sorter in stage 2, air valves and nozzles separate the desired colours. Each colour-separated cullet (green, amber, and flint) is transported by conveyors that run through the outer walls on the north side of Building 1 to their respective bunkers, ready for shipment from site (refer to **Figure 3-5**).

Figure 3-4: Optical Sorting Equipment



Figure 3-5: Conveyors transporting glass cullet to bunkers



3.3.4 Offtake

The processed glass streams are stored in separate glass storage bunkers, located on the northern side of Building 1 (refer to **Figure 3-6**, **Figure 3-7** and **Figure 3-8**), prior to being collected and transported via B-doubles and/or semi-trailers to glass manufacturing facilities elsewhere to make new recycled glass bottles.

Processed glass is taken to Visy Glass manufacturing facilities in Victoria, NSW, and South Australia to be re-made into glass bottles while mixed glass and glass fines are used as inputs in civil construction.

Figure 3-6: Glass Bunker - Amber



Figure 3-7: Glass Bunker - Flint



Figure 3-8: Finished Product - Processed Glass



3.4 Waste Types and Quantities

Subject to approval of the Project, the facility would receive the following waste types and quantities:

- Commingled recyclables: 170,000 tonnes per annum; and
- Paper and cardboard: 30,000 tonnes per annum.

Based on a 6 day operating week, this would equate to the following average daily and weekly waste quantities:

- Commingled recyclables: average of 543 tonnes per day and 3,260 tonnes per week; and
- Paper and cardboard: average of 95 tonnes per day and 575 tonnes per week.

These averages can vary significantly in response to operating conditions, customer needs and seasonality.

3.5 Waste Storage Stockpiles and Capacity

External bunkers provide separate storage for baled paper and cardboard, metals and plastics. The bales are organised into distinct groups to prevent cross contamination and are stacked to a maximum height of 4 m. Stockpiles are limited to 3 m in the MRF receival hall.

The commingled stream received at the facility comprises the same material types as currently processed: glass,

paper and cardboard, mixed plastics, metals and a residual fraction. The proportions of each material may vary slightly depending on source catchment, collection frequency, seasonal influences, and market conditions. The facility is designed and operated to accommodate this variability.

Table 3-2 sets out the indicative composition of incoming commingled recyclables based on current operational data.

Table 3-2 Composition of comingled recyclables stream

Material	Proportion of comingled recyclable stream (%)
Paper and cardboard	53%
Glass	19%
Mixed plastics	12%
Residual waste	13%
Metals (steel)	2.5%
Aluminium	0.5%

The site incorporates purpose-built storage infrastructure across multiple areas to manage variability in incoming material composition, planned maintenance events, storage ahead of off-take, and temporary disruptions to product offtake. The principal storage areas are identified in the Table 3-3.

Table 3-3 Storage areas and capacities

Storage area	Approximate capacity (tonnes)
MRF receival hall (normal loader operations)	180
MRF receival hall (loader access restricted)	300
Southern bunkers	300
Bunkers adjacent to glass beneficiation plant	200
Glass storage bunkers	1,500
Total existing on-site storage capacity	2,480

Under a worst-case scenario, such as a processing interruption requiring materials to be held on-site pending resumption of operations, total existing storage capacity across the receival hall, bunkers and glass storage areas is approximately 2,480 tonnes, compared to an average daily waste storage of approximately 638 tonnes. This provides sufficient contingency headroom relative to the facility's daily intake at the proposed expanded throughput.

In practice, on-site accumulation is actively managed through established product offtake arrangements:

Glass is dispatched regularly to domestic end markets, with approximately 1,500 tonnes per month leaving the site (Orora and Visy).

Paper and cardboard is dispatched on a regular basis to domestic buyers including Visy, which takes approximately 60% of volume, with additional buyers, including export markets, absorbing the remainder.

Mixed plastics are dispatched to Re.Group's Hallam Advanced Container and Plastics Sorting (CaPS) facility for

processing into separate plastic polymers. Re.Group is currently constructing a plastics sorting facility in Somersby, which will receive Enfield's mixed plastics for processing when it comes online before the end of the year.

Steel (baled and loose) and aluminium are dispatched to domestic and export markets, with no current constraints on demand.

These offtake arrangements, combined with the site's storage infrastructure, provide the operational flexibility required to manage the proposed increase in commingled throughput across a range of realistic material composition scenarios without adverse environmental impacts.

3.6 Traffic, Access and Car Parking

Condition 5 of the development consent specifies the maximum number of daily vehicle movements for delivery of materials to and despatch from the Site, summarised in **Table 3-2**.

Table 3-4: Existing Daily Service Vehicle Activity

Scenario	Annual Tonnage	Material Delivery (vehicles/day)		Material Collection (vehicles/day)	
		In	Out	In	Out
Existing PCR	30,000	33	33	5	5
Existing MRF	69,900	45	45	9	9
Site Total	99,900	78	78	14	14

The Project will generate the following *additional* daily traffic:

- Up to 58 trucks for delivery of additional material to the site (29 in, 29 out)
- Up to 13 trucks for collection and despatch of processed materials from the site (7 in, 6 out)
- Up to 12 light vehicles for staff related trips (6 in, 6 out).

The Traffic Impact Assessment (Solution Traffic Engineers, July 205) for DA 2015/177 noted that waste material will be delivered to the site (inbound materials) in a variety of vehicle types including, council garbage trucks, utes, vans and table tops with materials collected from the site by semi-trailer.

The material throughput increase will be partly sourced from centralised collection points (rather than kerbside collection) such as those servicing the Container Deposit Scheme and other MRFs. This will allow greater use of higher mass vehicles for waste deliveries to site, comprising B-doubles and semi-trailers with an indicative capacity of 34 tonnes per vehicle. This represents a significantly more efficient means of transport compared to the wider range of vehicles and lower mass vehicle types identified in the TIA for DA 2015/177.

No changes to the existing approved site access arrangements are proposed. The existing access arrangements are sufficient to support the additional vehicle movements required for the Project.

Trucks delivering material to the MRF currently access the site from Madeline Street via 'Gate 1' and pass over 'Weighbridge 1' to record the incoming volumes. The trucks then continue along the internal road to the loading bay at the rear of Building 1, where they reverse park at the roller doors (shown as 'Roller Door F' on **Figure 3-1**) for unloading before exiting the site using the same route back out to Madeline Street. There is adequate area on-site to enable vehicles to manoeuvre and, when necessary, queue.

Vehicles collecting the processed glass access the site from Madeline Street, entering 'Gate 1' and pass over 'Weighbridge 1'. The trucks then continue along the internal road to the loading bay at the rear of Building 1 to

turn around. They then continue on to the glass bunkers and loading area on the northern side of Building 1 for loading of the processed glass. Once loaded, the trucks exit the site back out onto Madeline Street, via 'Weighbridge 1' to record outgoing volumes.

All trucks exiting the site are required to travel north along Madeline Street. Trucks are prohibited from travelling south on Madeline Street, with concrete chicanes set up on the road adjacent to Cooke Park. The primary transport route for trucks traveling to and from the site will continue to be Madeline Street, Cleveland Street and Cosgrove Road to connect to the Hume Highway and wider road network. This road network is extensively utilised by trucks associated with the various operations within the industrial estate in which the site is situated and it has sufficient capacity to cater for the increase in traffic generation associated with the Project.

The Project will not result in any change to existing on-site car parking requirements or arrangements, with the current car parking provision sufficient to accommodate the existing and proposed car parking needs. In accordance with Condition 20 of DA 2015/177, a total of 29 off-street parking spaces are currently provided to cater for an approved 24 employees on site at any one time. The facility operates on a rotating two-shift basis. Under the Project, there will be a maximum of 21 employees present on the site at any one time, comprising four office staff and 17 personnel working in the MRF and the PCR facility per shift (refer to **Section 3.8**). A number of staff car pool for trips to and from the site which reduces demand for car parking.

3.7 Hours of Operation

The existing facility operations vary depending on the recyclable waste stream. The approved hours of operation for the MRF and PCR Facility, along with restrictions imposed by Development Consent DA 2015/177/2 in terms of traffic generation and roller door openings, are detailed in **Table 2-2**.

DA 2015/177/3 provides for extended operating hours (refer to **Table 2-3**) associated with the temporary approval for increased waste receipt and processing in response to fire damage to Re.Group's Hume MRF. The temporary period extends to 30 June 2027 after which the operating hours revert to the hours indicated above.

The Project proposes a slight variation to the hours of operation approved under Development Consent DA 2015/177/2 to allow material to be received at the MRF from 4.30am to 6pm, Monday to Saturday. Under DA 2015/177/2, receipt of materials at the MRF must only take place between the hours of 4.30am and 3pm, with the roller doors to be closed at 3pm.

The proposed change will allow for the additional daily truck movements delivering the additional material to site. All other activities associated with the additional co-mingled waste processing will be undertaken within the hours currently imposed by DA 2015/177/2.

3.8 Employment

The Project will generate an additional six (6) full-time positions.

Under Development Consent DA 2015/177/2, a maximum of 24 employees are permitted to be present on the site at any one time.

Currently, the facility operates on a rotating two-shift basis, so that there is a maximum of 18 employees present on the site at any one time (i.e. four office staff and 14 personnel working in the MRF and the PCR facility per shift).

Under the Project, there will be a maximum of 21 employees present on the site at any one time (i.e. four office staff and 17 personnel working in the MRF and the PCR facility per shift).

The MRF currently operates from 5am to 10pm with the Shift 1 staff working from 5am to 1.30pm, while the Shift 2 staff work from 1.30pm to 10pm.

3.9 Waste Management from Operations

The primary source of operational waste is packaging and food waste associated with employees. Waste stream specific bins are provided in the office administration area and staff areas to encourage the source separation of waste. Operations related waste is transported off-site by a licenced contractor for recovery or disposal at a licenced facility. The addition of three employees per shift will not significantly increase the volume of operations related waste, and can be managed within existing capacity and processes.

3.10 EPL Variation

The existing facility operates under the provisions of an environment protection licence (EPL), being EPL 20576, administered by the Environment Protection Authority (EPA) under the *Protection of the Environment Operations Act 1997* (POEO Act).

EPL 20576 currently authorises the carrying out of scheduled and fee-based activities at the premises as summarised in **Table 3-3**.

Table 3-5: Scheduled and Fee Based Activities Authorised by EPL 20576

Scheduled Activity	Fee Based Activity	Scale
Resource Recovery	Recovery of general waste	Any general waste recovered
Waste Storage	Waste storage – other types of waste	Any other types of waste stored

Condition L2.3 specifies the types and quantities of waste that can be received on-site being not more than 69,900 tpa of glass, plastic or metal waste and 30,000 tpa of paper or cardboard. Condition L2.4 limits the amount of waste materials permitted on the premises at any one time to 4,200 tonnes.

Subject to obtaining approval for the Project, Re.Cycle will apply to the EPA to vary the existing EPL 20576, to accommodate the proposed changes in site operations.

Specifically, Re.Cycle will seek a variation to Condition L2.3 to increase the limit for glass, plastic or metal waste by an additional 100,100 tpa, a variation to Condition L2.4 to increase the amount of waste permitted on the premises at any one time to 8,000 tonnes, and a variation to L4.2 to amend the hours of operation at the MRF.

Note: the temporary increase in waste that can be received on site approved through DA 2015/177/3 (modification 3) led to a corresponding temporary change to the limits in Condition L2.3 of the EPL:

- Storage and resource recovery of paper, glass, plastics and metal – no more than 120,000 tpa to be received at the MRF; and
- Storage and resource recovery of paper and cardboard – no more than 30,000 tpa to be received.

Condition L2.4 was also amended so that the authorised amount of waste permitted on the premises cannot exceed 6,300 tonnes at any one time until 30 June 2027. On 1 July 2027, the licensee must comply with condition 8 of DA2015.177.3 (a maximum of 4,200 tonnes to be stored on site at any one time)

Condition L2.5 was also added so that the annual throughput in line one in table L2.3 of 120,000 tonnes is permitted at the site until 30 June 2027. On 1 July 2027, the licensee must comply with condition 7 of DA2015.177.3 which refers to the originally approved quantities of waste for the PCR and MRF of 30,000 tpa and 69,900 tpa respectively.

4 Statutory Context

This chapter identifies the relevant statutory requirements that must be considered by the consent authority. The relevant statutory requirements are described in terms of power to grant consent, permissibility, other approvals, pre-conditions and mandatory considerations.

4.1 Key Statutory Requirements

Table 4-1 outlines the key statutory requirements pertaining to the Project, including permissibility, power to grant approval and other relevant approvals.

Table 4-1: Key Statutory Requirements

Statutory Matters	Project Comment
Permissibility	The Project is characterised as a ‘waste or resource management facility’, defined in the <i>Standard Instrument – Principal Local Environmental Plan</i> (Standard Instrument) as: <i>Waste or resource management facility means any of the following -</i> (a) <i>a resource recovery facility,</i> (b) <i>a waste disposal facility,</i> (c) <i>a waste or resource transfer station,</i> (d) <i>a building or place that is a combination of any of the things referred to in paragraphs (a)–(c).</i> More specifically, the Project is characterised as a ‘resource recovery facility’, defined in the Standard Instrument as: <i>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.</i> <i>Note—Resource recovery facilities are a type of waste or resource management facility</i> The site is located on land zoned E4 General Industrial under the provisions of the Strathfield LEP. According to the Land Use Table in Part 2 of the LEP, waste or resource management facilities are not permitted in the E4 General Industrial zone. Notwithstanding, Division 23 of Chapter 2, Part 2.3 of the <i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i> (Transport and Infrastructure SEPP) permits development for the purpose of waste or resource management facilities with consent on land in a ‘prescribed zone’. Section 2.152 of the SEPP confirms that the E4 General Industrial zone is a prescribed zone. The Project is therefore permissible with development consent, pursuant to the provisions of the Transport and Infrastructure SEPP.
Power to grant approval	The Project is classified as SSD under Part 4, Division 4.7 of the EP&A Act, in accordance with the categories and thresholds listed under Section 23(3) of Schedule 1 of the Planning Systems SEPP, being: <i>23 Waste and resource management facilities</i> <i>(3) Development for the purpose of resource recovery or recycling facilities that handle more than 100,000 tonnes per year of waste.</i> If the Project is approved, the MRF will handle up to 200,000 tpa of waste. The development is therefore appropriately categorised as SSD. Pursuant to section 4.5(a) of the EP&A Act, the Minister for Planning and Public Spaces (or his delegate) is the consent authority for SSD, unless the Independent Planning Commission (IPC) is

Statutory Matters	Project Comment																						
	declared to be the consent authority by an environmental planning instrument. Under Section 2.7 of the Planning Systems SEPP, the IPC will determine the SSD application if: - the local Council objects to the proposed development; - there are at least 50 submissions objecting to the development; or - the applicant has disclosed a reportable political donation in connection with the application.																						
Other approvals	The following section outlines other legislative approvals required for the Project in addition to development consent under Division 4.7 of the EP&A Act. Consistent Approvals Section 4.42 of the EP&A Act stipulates that certain authorisations cannot be refused if they are necessary for the carrying out of SSD. The following table lists legislative approvals that are required for the Project and cannot be refused if the Project is approved. <table> <tr> <th>Legislative Approval</th><th>Required</th></tr> <tr> <td>An aquaculture permit under the <i>Fisheries Management Act 1994</i></td><td>No</td></tr> <tr> <td>An approval under section 15 of the <i>Mine Subsidence Act 1961</i></td><td>No</td></tr> <tr> <td>A mining lease under the <i>Mining Act 1992</i></td><td>No</td></tr> <tr> <td>A production lease under the <i>Petroleum (Onshore) Act 1991</i></td><td>No</td></tr> <tr> <td>An environment protection licence under the <i>Protection of the Environment Operations Act 1997</i></td><td>Yes</td></tr> <tr> <td>A consent under section 138 of the <i>Roads Act 1993</i></td><td>No</td></tr> <tr> <td>A licence under the <i>Pipelines Act 1967</i></td><td>No</td></tr> </table> Note: The Project will require a variation to EPL 20576, as described in Section 3.10. Following approval of the Project, Re.Cycle will submit an application to the EPA to vary the EPL pursuant to the provisions of the POEO Act. EPBC Act Approval The Commonwealth <i>Environmental Protection and Biodiversity Act 1999 Act</i> (EPBC Act) provides a legal framework to protect and manage nationally and internationally important flora, fauna, ecological communities and heritage places. These are known as matters of National Environmental Significance (MNES). The Project is not likely to impact any MNES. Therefore, the Project is not required to be referred to the Federal Department of the Environment to determine if it constitutes a 'controlled action' requiring EPBC Act approval. Other Approvals Section 4.41 of the EP&A Act stipulates that certain authorisations are not required for SSD. The following table lists legislative approvals that may otherwise be required if the Project was not SSD. <table> <tr> <th>Legislative Approval</th><th>Required</th></tr> <tr> <td>A permit under section 201, 205 or 219 of the <i>Fisheries Management Act 1994</i></td><td>N/A</td></tr> <tr> <td>An approval under Part 4, or a permit under section 139 of the <i>Heritage Act 1977</i></td><td>N/A</td></tr> </table>	Legislative Approval	Required	An aquaculture permit under the <i>Fisheries Management Act 1994</i>	No	An approval under section 15 of the <i>Mine Subsidence Act 1961</i>	No	A mining lease under the <i>Mining Act 1992</i>	No	A production lease under the <i>Petroleum (Onshore) Act 1991</i>	No	An environment protection licence under the <i>Protection of the Environment Operations Act 1997</i>	Yes	A consent under section 138 of the <i>Roads Act 1993</i>	No	A licence under the <i>Pipelines Act 1967</i>	No	Legislative Approval	Required	A permit under section 201, 205 or 219 of the <i>Fisheries Management Act 1994</i>	N/A	An approval under Part 4, or a permit under section 139 of the <i>Heritage Act 1977</i>	N/A
Legislative Approval	Required																						
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An environment protection licence under the <i>Protection of the Environment Operations Act 1997</i>	Yes																						
A consent under section 138 of the <i>Roads Act 1993</i>	No																						
A licence under the <i>Pipelines Act 1967</i>	No																						
Legislative Approval	Required																						
A permit under section 201, 205 or 219 of the <i>Fisheries Management Act 1994</i>	N/A																						
An approval under Part 4, or a permit under section 139 of the <i>Heritage Act 1977</i>	N/A																						

Statutory Matters	Project Comment	
	An Aboriginal heritage impact permit (AHIP) under section 90 of the <i>National Parks and Wildlife Act 1974</i>	N/A
	A bush fire safety authority under section 100B of the <i>Rural Fires Act 1997</i>	N/A
	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 <i>Water Management Act 2000</i> .	N/A

4.2 Pre-Conditions to Exercising the Power to Grant Approval

Pre-conditions are the mandatory conditions that must be satisfied before the consent authority may exercise its power to grant approval for the Project.

Table 4-2 below identifies the pre-conditions which are relevant to the Project. The table includes a cross-reference to where each matter is addressed in the EIS.

Table 4-2: Pre-Conditions

Statutory Instrument	Pre-Condition	Relevance	Section in EIS
<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>	Chapter 2 Vegetation in Non Rural Areas does not apply as the Project does not involve vegetation clearing. Chapter 6 Water Catchments does not apply as the Project is not located in a regulated water catchment.	Not applicable	Refer to Section 6.8.1
<i>State Environmental Planning Policy (Industry and Employment) 2021</i>	The SEPP does not apply as the Project site is not located in the Western Sydney Employment Area and does not include advertising or signage.		
<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>	Part 3 Potentially hazardous or potentially offensive development does not apply as the Project does not trigger the requirements to be potentially hazardous or offensive as it will not change the quantities of dangerous goods transported to or stored on site or increase the risk of odour generation.		Refer to Section 6.1.3 and 6.5.2
<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>	Section 2.122 Traffic Generating Development Section 2.122 of the SEPP requires a consent authority, before determining an application to which the section applies, give written notice of the application to Transport for NSW and take into consideration any submission provided.	The Section applies to Traffic Generating Development. Schedule 3 of the SEPP identifies categories of development to be referred to TfNSW. This includes waste or resource management facilities of any size or capacity. The application must be notified to TfNSW prior to determination	n/a

Statutory Instrument	Pre-Condition	Relevance	Section in EIS
		of application.	

4.3 Mandatory Matters for Consideration

Mandatory considerations are the matters that the consent authority is required to consider in deciding whether to grant approval for the Project. These considerations are summarised in **Table 4-3**, together with a cross-reference to where each matter is addressed in the EIS.

Table 4-3: Mandatory Matters for Consideration

Statutory Reference	Mandatory Considerations	Section in EIS
Considerations under the EP&A Act and Regulation		
Section 4.15	Relevant matters for consideration by the consent authority in the evaluation process include:	
	Environmental planning instruments	This table
	Draft environmental planning instruments	N/A
	Development control plans	N/A
	Planning agreements or draft planning agreements	N/A
	The EP&A Regulations	A declaration by a Registered Environmental Assessment Practitioner is provided at the start of the EIS. Principles of Ecologically Sustainable Development are addressed in Section 7.
	The significant likely impacts of the development, including environmental impacts on both the natural and built environments, and social and economic impacts in the locality	Assessment of impacts is provided in Section 6. The assessment focuses on issue that have the potential for significant likely impacts, consistent with provisions of Section 4.15(b). As the Project entails an intensification of existing approved operations and does not involve any construction works or changes to site operations the assessment of significant likely impacts has focused on traffic, air,

Statutory Reference	Mandatory Considerations	Section in EIS
		noise, hazards and risk and social impacts. Other matters have been addressed in the assessment but these are not considered to be significant likely impacts.
	Suitability of the site for the development	Section 2.6
	Any submissions made	N/A
	The public interest	Section 7
Considerations under other legislation		
Section 7.14 of the <i>Biodiversity Conservation Act 2016</i> (BC Act)	The likely impact of the proposed development on biodiversity values as assessed in the Biodiversity Development Assessment Report (BDAR). The Minister for Planning may (but is not required to) further consider under that BC Act the likely impact of the proposed development on biodiversity values. Upon application being made, DPPI (or delegate) may determine that the proposed development is not likely to have any significant impact on biodiversity values. In which case, a BDAR waiver is able to be obtained. A BDAR waiver application has been submitted and has been accepted by DPPI.	BDAR waiver acceptance letter – Appendix J
Considerations under Environmental Planning Instruments		
<i>State Environmental Planning Policy (Transport and Infrastructure) 2021</i>	Section 2.122: Traffic generating development The consent authority must take into consideration: - any submission from TfNSW - the accessibility of the site concerned, including: - the efficiency of movement of people and freight to and from the site and the extent of multi-purpose trips, and - the potential to minimise the need for travel by car and to maximise movement of freight in containers or bulk freight by rail, and - any potential traffic safety, road congestion or parking implications of the development.	Traffic and Transport – Section 6.3
<i>State Environmental Planning Policy (Resilience and Hazards) 2021</i>	Chapter 3 – Hazardous and Offensive Development Section 3.7 of the SEPP requires the consent authority, in making a determination on a potentially hazardous or potentially offensive development, to consider: - current circulars or guidelines published by the Department of Planning relating to hazardous or offensive development, and - whether any public authority should be consulted concerning any environmental and land use safety requirements with which the development should comply, and - in the case of development for the purpose of a potentially	SEPP-RH Assessment – Section 6.5 Fire Incident Management - Section 6.4

Statutory Reference	Mandatory Considerations	Section in EIS
	hazardous industry—a preliminary hazard analysis prepared by or on behalf of the applicant, and - any feasible alternatives to the carrying out of the development and the reasons for choosing the development the subject of the application (including any feasible alternatives for the location of the development and the reasons for choosing the location the subject of the application), and - any likely future use of the land surrounding the development. The Project is not classified as potentially hazardous or potentially offensive.	
<i>State Environmental Planning Policy (Biodiversity and Conservation) 2021</i>	Chapter 2 (Vegetation in Non-Rural Areas) does not apply as the Project does involved clearing of vegetation. Chapter 6 (Water Catchments) of the SEPP does not apply as the site is not located in a regulated water catchments.	N/A
<i>Strathfield LEP 2012</i>	Part 4 Principal Development Standards do not apply as the Project does not involve any new buildings, structures or infrastructure or changes to the site layout.	N/A
	Cl 5.21 Flood Planning does not apply as the Project does not involve any development that would alter the hydrology of the site or change flood risk	N/A
Development Control Plans		
<i>Strathfield Consolidated Development Control Plan (DCP) 2005</i>	Section 2.10 of the Planning Systems SEPP states that DCPs do not apply to SSD. As such, it is not a mandatory requirement for the Project to be assessed against the Strathfield Consolidated DCP 2005.	N/A

5 Community and Stakeholder Engagement

This chapter summarises the issues raised through the community and stakeholder engagement carried out for the Project during the preparation of the EIS and how these issues have been addressed. It also outlines the approach to future community and stakeholder engagement.

5.1 Engagement Overview

Consultation with the local community and relevant stakeholders has been undertaken during the preparation of this EIS, in accordance with the Project SEARs and relevant guidelines, including:

- *Undertaking Engagement Guidelines for State Significant Projects* (DPHI, 2024);
- *The IAP2 Public Participation Spectrum* (IAP2, 2018); and
- *Social Impact Assessment Guideline for State Significant Projects* (DPIE, 2021e).

A comprehensive report detailing the approach to engaging with the community and stakeholders, including Government agencies and nearby businesses, has been prepared and is provided in full in Appendix C and summarised in this chapter.

The engagement process for the Project aimed to:

- Update and inform the local community and stakeholders about the Project, its impacts and benefits;
- Help the local community understand the development approval process and how they can participate in the process;
- Respond to community feedback by making necessary changes to the Project and including appropriate mitigation measures in the EIS; and
- Enable authentic conversations, through all stages of the EIS, by using quality engagement and communication materials that enable community members and stakeholders to provide informed feedback.

5.2 Identified Stakeholders

A stakeholder is anyone who has an interest or may be impacted by the Project.

Several considerations determined the identification of stakeholders, including the Site's location within an industrial zone, that no construction would be undertaken and that traffic impacts would be limited to north Madeline Street and other roads within the industrial zone.

Stakeholders were grouped into two broad categories (i.e. community, and government authorities and agencies), as detailed in **Table 5-1**.

Table 5-1: Identified Stakeholders

Stakeholder	Potential Concern
Community	
Local residents - Nearby and adjacent residents within 500m of the site, specifically: - Madeline Street - Chisolm Street - Birriwa Avenue - Blanche Street Local businesses - Nearby and adjacent along: - Madeline Street - Hope Street - Pilcher Street - Cleveland Street - Cosgrove Road Sporting groups - Users of Cooke Park Sporting fields and Cooke Skate Park - Belmore Eagles F.C - Australian Academy of Football - St John's Eagles Junior Rugby Football Club - Super 6 Soccer	- Potential concerns: - Noise and vibration impacts - Traffic and transport impacts - Air quality and odour impacts
Government Authorities & Agencies	
Local government - Strathfield Council State government agencies and departments - NSW Department of Planning, Housing and Infrastructure (DPHI) - Department of Climate Change, Energy, the Environment and Water (DCCEEW) - Environment Protection Authority - Sydney Water - Fire and Rescue NSW - Transport for NSW	- Potential concerns: - Noise and vibration impacts - Traffic and transport impacts - Air quality and odour impacts - Water quality impacts - Biodiversity impacts, regarding the Green and Golden Bell Frog (<i>litoria aurea</i>) habitat. - Compliance with relevant legislative requirements - Engagement with impacted communities - Management of environmental, social, and economic impacts from the Project. - Impacts to utility infrastructure.

5.3 Engagement Activities

A range of consultation/engagement tools and activities were developed and implemented during the preparation of the EIS, to ensure the engagement objectives were achieved. These are summarised in **Table 5-2**.

Engagement activities included a newsletter drop (refer to **Figure 5-1** for the area covered by newsletter distribution team as shown by the red line), online survey, website updates, door knocking, stakeholder briefings, a community drop in session and email notifications.

Table 5-2: Summary of Engagement Activities to Date

Engagement activity	Target stakeholder	Activity and stakeholders reached
Newsletter Letterbox drop	Surrounding landowners and occupiers	A Newsletter was distributed to 456 properties on 17 October 2023 within the area shown in Figure 5-1 (the red line shows the distribution route followed). It provided information to local communities and residents, gave forward notice of upcoming consultation programs and included the community survey.
Online survey	All interested stakeholders	- An online survey was used to identify social and economic impacts associated with the Project and understand community views and aspirations for the Project. It was open from 17 October 2023 until 5 November 2023. The survey was accessible through the newsletter, the website update, and the in-person drop-in session. - One response was received to the survey.
Website update	All interested stakeholders	The webpage acts as a central repository of information relating to the Project, including publicly available documents and communications materials prepared by the proponent. The website update went live on 20 October 2023 on the Re.Group website and includes an email address and phone number to make inquiries.
Door-knocking	Surrounding landowners and occupiers	- Door-knocking with representatives from bd infrastructure and Re.Cycle occurred on 23 October 2023. - Door-knocking reached 25 properties along Madeline Street and Excelsior Street. - Door-knocking was used to outline specific project impacts to stakeholders with the potential to be directly affected by the Project and have their feedback collected. - Appropriate materials such as the newsletter fact sheet and survey forms were made available to door-knocked residents.
Stakeholder briefings	- Surrounding business owners, occupiers, and sporting teams - Strathfield Council	- An online stakeholder briefing with local business occurred on 18 October 2023. An online stakeholder briefing with Strathfield Council occurred on 9 November 2023. - Briefings provided targeted and tailored information to specific stakeholders and gathered feedback.
Community drop-in session	Surrounding landowners and occupiers, sporting groups of Cooke Park and local community groups	An in-person information session was held on 24 October 2023 between 5:30pm and 6:30pm. It provided community members and stakeholder groups with an opportunity to meet the project team, provide informed feedback about the EIS and ask questions.

Engagement activity	Target stakeholder	Activity and stakeholders reached
Email notification	- Surrounding business owners and occupiers, sporting teams and local community groups - Strathfield Council - Jason Yat-sen Li (Member for Strathfield) - Department of Planning and Environment (Environment & Heritage Group, Water Group, Environment Protection Authority) - Sydney Water NSW - Fire and Rescue NSW - Transport for NSW	- Desktop analysis identified relevant and affected stakeholders within a 500m radius of the Project. - Email correspondence was issued to affected stakeholders between 10 October and 16 November 2023. - Email correspondence was sent to local businesses, sporting teams, education facilities and Strathfield Council on 12 October 2023, introducing the Project and offering an online briefing session for interested parties. - Email correspondence was sent on 16 November to the Member for Strathfield and relevant Government agencies providing details of the Project and offering an opportunity to raise any further issues and/or assessment requirements and attend an online meeting, if required.

5.4 Consultation Outcomes

Table 5-3 below summarises the feedback provided by the local community and stakeholders and the Project response.

5.5 Future Community and Stakeholder Engagement

Re.Cycle will continue to provide opportunities for local residents, landowners, businesses, and key agencies to make enquiries and provide feedback as the SSD application progresses. Information about the Project will be available for continued future viewing on the Re.Group website. Contact details, including a telephone number and email address, will continue to be available on the website.

The next stage of community engagement will involve closing the loop with the community during public exhibition of the EIS. Re.Cycle will host an online information session to outline how feedback and concerns from the community were used to inform the SIA and mitigation measures within the EIS.

Figure 5-1: Newsletter Distribution Map



Table 5-3: Consultation Summary Table

Stakeholder	Method	Issue Raised	Project Response
Community			
Surrounding landowners, businesses, and occupiers within a 500m radius from the site, as shown in Figure 5-1. Surrounding landowners and occupiers on: ▪ Madeline Street ▪ Excelsior Street	A community newsletter was distributed to 456 properties on 17 October 2023. The community newsletter outlined the Project and invited feedback via a mobile number, enquiry email and a QR link to a survey. The newsletter provided information on how to RSVP to the in-person drop-in session. A copy of the community newsletter and survey distributed to surrounding landowners and occupiers is provided in Appendix C. Door knocking to 25 potentially impacted residents was conducted on 23 October 2023. Door knocking was attended by two bd infrastructure representatives and one Re.Cycle representative. An in-person drop-in session was held on 24 October 2023, at 40-42 Madeline Street (Re.Cycle's visitors office) and was attended by three community members.	Project information To date, one landowner or occupier has raised concerns, via the project survey, about a lack of available information regarding the Project. Operating hours During door knocking, one resident on Madeline Street raised concerns about the proposed extension of operating hours. The resident noted that Cooke Skate Park was popular with children late at night and is situated close to the industrial area. Another resident was ok with the operating hours, as it did not impact bedtime. During the community drop-in session, three residents raised concerns about the extended hours of operation. One resident was ok with extended operating hours Monday-Friday but was against extending operating hours on Saturdays. Two other residents agreed. Noise impacts During door knocking, four residents noted noise concerns. One resident noted they can hear some noise outside, but that they were ok with the general level of noise. Three other residents noted high levels of noise discomfort, especially from truck and forklift beeping noises early in the morning. They did not want the Project to increase noise levels. During the community drop-in session, three residents noted noise discomfort, with one resident identifying forklift and truck beeping noises as their main concern.	Re.Cycle is committed to maintaining contact with the community throughout the approval process to keep them informed of any updates and/or changes to the Project. An Air Quality Assessment has been undertaken for the Project. Refer to Section 6.1 and Appendix D A Noise and Vibration Assessment was undertaken for the Project. Refer to Section 6.2 and Appendix E A Traffic Impact Assessment was undertaken for the Project. Refer to Section 6.3 and Appendix F Re.Cycle has prepared an Environmental Management Plan that includes a series of Environmental Management Programs developed to enable effective control and monitoring of identified potential impacts. Re.Cycle has a Traffic Management Plan that includes consideration of access routes to the facility, management of traffic on Madeline Street, and weighbridge traffic flows. Re.Cycle has a complaints hotline and responds directly to concerns raised by the residents about current operational impacts. Noise mitigation measures such as an extension of the noise wall and repairing the roof and building facade are forthcoming were approved in February 2025 and are in the process of being implemented. Re.Cycle conducts an independent noise audit annually, which is submitted to the EPA. External bunkers are being enclosed which is expected to reduce the prevalence of pests. Improvements have been made to the existing bunkers, including closing all

Stakeholder	Method	Issue Raised	Project Response
		Air quality and dust impacts During door knocking, two residents communicated their air quality and dust concerns. They did not want the Project to further diminish air quality. During the community drop-in session, three residents noted issues with dust and air quality. Traffic impacts During door knocking, one resident noted the poor quality of road on Madeline Street, especially the northern section. Large potholes and ad-hoc repairs. The resident noted an increase in truck numbers could make the road quality worse. The resident wanted the quality of the road to be improved with the proposed increase in truck numbers. During the community drop-in session, two residents expressed their concerns about truck traffic along Cosgrove Road. All residents did not want the Project to further diminish air quality, traffic and noise in the area. Pests Two residents noted concerns regarding insects and vermin. They did not want the Project to increase the prevalence of insects and vermin. Odour Three residents noted odour concerns. Three residents noted that foul odour has been increasing. Operational Residents also raised several existing operational issues not related to the project.	gaps and adding roller doors, which should also reduce the prevalence of pests. An odour misting system is installed at the entrance of the MRF receival hall, where unsorted yellow bin waste is first received.

Stakeholder	Method	Issue Raised	Project Response
		Vermin and Pests One adjacent business owner noted an increase in vermin and insects on their site and did not want the Project to further increase the prevalence of these issues. The business owner also noted an increased number of birds dropping rubbish on their site. Another business owner, who declined an offer of briefing noted dust concerns from the current operation of the facility.	Re.Cycle followed up with the business owner within a week and has been worked the business owner to implement appropriate mitigation measures.
Sporting groups	Email and offer of a briefing session.	Two sporting groups declined the offer of a briefing. Three sporting groups did not respond.	Re.Cycle is committed to maintaining contact with the community throughout the approval process to keep them informed of any updates and/or changes to the Project.
School	Email and offer of a briefing session.	No response.	
Member for Strathfield, Jason Yat-sen Li	Email update.	No response.	
Government Authorities & Agencies			
Strathfield Council	An online briefing session was held on 9 November 2023 with Council staff and attended by representatives from EME Advisory and Re.Cycle. The aim of the briefing was to provide an overview on the Project, an update regarding the engagement undertaken to date and to confirm what specialist assessment reports would accompany the EIS.	Council staff raised concerns about potential noise and dust impacts but noted that most of the complaints they currently receive in relation to noise and dust are associated with ‘Aussie Skips’ on the adjoining site. The EIS should therefore consider cumulative noise and dust impacts in the overall context of the locality. Residents in Madeline and Excelsior Streets are particularly concerned about early morning noise levels. Council staff suggested Re.Cycle undertake noise surveys independent of the current EPL requirements (i.e. annual noise audit). Council staff also noted legacy issues that predate Re.Cycle’s acquisition of the site.	Noise and air quality assessments have been undertaken, including a cumulative air quality assessment with the adjacent Aussie Skips site. Both assessments concluded that emissions are within assessment criteria. DA modification 3 and 4 (i.e. DA 2015/177/3 approved in November 2023 and DA 2015/177/4 approved in February 2025) include a condition requiring staged noise and odour auditing programs, which Re.Cycle has complied with and additional noise mitigation measures. The odour surveys indicated no distinct odours from the site were detectable at the nearest sensitive receptor locations, and the noise audits demonstrated that the noise criteria continue to be satisfied during all time periods at all nearby residential

Stakeholder	Method	Issue Raised	Project Response
		specifically involving non-compliance with existing conditions of consent in relation to noise and dust. Council staff advised they were generally happy with the current approach to engagement and assessment.	receivers. Re.Cycle continues to maintain its odour misting system at the site and has implemented approved noise mitigation measures. Re.Cycle is committed to maintaining contact with Strathfield Council throughout the approval process to keep them informed of any updates and/or changes to the Project. Re.Cycle has offered to hold another online briefing session with Council staff during the EIS exhibition period.
- NSW Department of Planning, Housing and Infrastructure (DPHI) - Department of Climate Change, Energy, the Environment and Water (DCCEEW) including Heritage NSW and Water Group - Environment Protection Authority	Email correspondence was sent to EHG, DPE Water and EPA on 16 November 2023, providing details of the Project and offering an opportunity to raise any further issues and/or assessment requirements and attend an online meeting, if required.	EHG (now Conservation Programmes, Heritage and Regulation CPHR) responded via email on 17 November 2023, advising that they will review the EIS when it is on exhibition. DPE Water now (Department of Climate Change, Energy, the Environment and Water (DCCEEW) responded via email on 23 November 2023, advising that they have no further comments or assessment requirements for the EIS and are satisfied with the proposed approach. At the time of writing, no response had been received from the EPA.	Re.Cycle is committed to maintaining contact with the relevant Government authorities and agencies throughout the approval process to keep them informed of any updates and changes to the Project.
Sydney Water	Email correspondence was sent to Sydney Water on 16 November 2023, providing details of the Project and offering an opportunity to raise any further issues and/or assessment requirements and attend an online meeting, if required.	Sydney Water responded via email on 20 November 2023, advising that the concerns Sydney Water would like addressed in the EIS, namely service demands for drinking water and wastewater and that satisfactory arrangements for these have been made are already outlined in the SEARs.	The Project is adequately serviced to meet its needs. The additional employees would place a minor increase in demand on water and water services but this demand can be met through existing servicing capacity.
Fire and Rescue NSW	Email correspondence was sent to FRNSW on 16 November 2023, providing details of the Project and offering an opportunity to raise any further issues and/or assessment requirements and	At the time of writing, no response had been received from FRNSW.	

Stakeholder	Method	Issue Raised	Project Response
	attend an online meeting, if required.		
Transport for NSW	Email correspondence was sent to TfNSW on 16 November 2023, providing details of the Project and offering an opportunity to raise any further issues and/or assessment requirements and attend an online meeting, if required.	TfNSW responded via email on 8 December 2023, advising that they will provide further commentary when a detailed Traffic Impact Assessment is submitted for review.	

6 Assessment and Mitigation of Impacts

This section provides a detailed summary of the assessment of the potential environmental impacts of the Project and addresses the key issues identified in the SEARs (see Appendix A for a SEARs cross-reference table). It also summarises the key findings of the various specialist technical studies undertaken for the Project and outlines the environmental management measures that will be implemented to avoid, minimise, mitigate and/or offset the impacts of the Project.

This chapter provides an assessment of potential environmental impacts associated with the Project. The approach to assessment separates environmental matters into two categories:

- **Section 6.1 to Section 6.9** provides a *detailed assessment* of relevant environmental matters, supported by a specialist technical report appended to the EIS; and
- **Section 6.10 to Section 6.15** provides a *desktop assessment* for relevant environmental matters as a detailed assessment is not warranted.

This approach is consistent with principles of proportionality and risk-based assessment established in the objects of the Act, the focus on significant likely environmental impacts in Section 4.15 of the Act, and the State significant guidelines.

Environmental matters identified as requiring a detailed assessment are generally identified as potentially having a significant likely impact on the existing environment if not appropriately mitigated or managed or where there is uncertainty with respect to impacts and / or mitigation. The detailed assessment includes a comprehensive technical assessment, detailing potential impacts and the mitigations recommended to avoid, mitigate and/or offset the impacts of the Project.

Desktop assessments have been adopted for environmental matters that are not considered to have a significant likely impact and a qualitative assessment is appropriate or where the approach to mitigation is well understood.

As the Project does not involve any construction works or changes to site layout, the key issues relate to the intensification of operations such as traffic, noise, air, hazards / risks and social impacts.

6.1 Air Quality and Odour

A detailed Air Quality Impact Assessment (AQIA) has been prepared for the Project and is provided in full in **Appendix D** and summarised below.

6.1.1 Methodology

The purpose of the AQIA was to identify and examine potential air quality impacts associated with the Project and to recommend mitigation and monitoring measures commensurate with those impacts, to ensure that relevant air quality criteria are achieved at all surrounding sensitive receptor locations.

The AQIA was undertaken in accordance with relevant NSW legislation and guidelines, including:

- *Protection of the Environment Operations Act 1997* (POEO Act);
- Protection of the Environment Operations (Clean Air) Regulation 2022;
- Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (EPA, 2022); and
- Technical Framework and Notes: Assessment and Management of Odour from Stationary Sources in NSW (DEC, 2006).

6.1.2 Existing Environment

6.1.2.1 Sensitive receptor Locations

The sensitive receptors identified for the purposes of the AQIA are listed in **Table 6-1** and their location is shown in **Figure 6-1**. The closest residential receptor is located 210 m to the south-east, on the corner of Excelsior Avenue and Chisholm Street.

Table 6-1: Sensitive Receptor Locations Used in the AQIA

Receptor ID	Location	Land Use	Coordinates (UTM)	
			mE	mS
R1	17 Excelsior Avenue	Residential	322 530	6 247 475
R2	150 Dean Street	Residential	322 246	6 247 889
R3	569-573 Fitzgerald Crescent	Residential	321 970	6 248 623
R4	34 Jean Street	Residential	321 218	6 248 491
R5	14 Callistemon Grove	Residential	321 171	6 247 851
R6	182 Roberts Road	Residential	321 007	6 246 825
R7	2 Wentworth Street	Residential	321 827	6 246 730
R8	79 Madeline Street	Residential	322 353	6 247 268
I1	Near northern boundary (adjacent to site)	Industrial	322 300	6 247 609
I2	Near north-western boundary (across road from site)	Industrial	322 201	6 247 603
I3	Near western boundary (across road from site)	Industrial	322 208	6 247 566
I4	Near southern boundary (adjacent to site)	Industrial	322 348	6 247 436
I5	South-west of site	Industrial	322 211	6 247 377
A1	Cookes Park	Recreational	322 389	6 247 348
A2	Begnell Field	Recreational	322 311	6 247 187
A3	Alphabeta Preparatory School	Recreational	322 929	6 247 535
A4	Dean Reserve	Recreational	322 339	6 247 808
A5	St Anne's Primary School	Educational	322 261	6 248 100

Figure 6-1: Population Density and Sensitive Receptor Locations



Source: Northstar

6.1.2.2 Background Conditions

Background air quality data was obtained from the Chullora Air Quality Monitoring Station (AQMS), located approximately 3.1 km from the site, being the closest representative AQMS with data available for the year 2020 (consistent with the meteorological modelling).

It was noted that a number of AQMS in NSW metropolitan and regional population centres recorded particulate matter concentrations above the national standard on a number of days towards the start of 2020. This was mainly driven by intense drought conditions and a high frequency of bushfires occurring across NSW in early 2020 (NSW DPIE, 2021).

A summary of air quality monitoring data for the year 2020 is provided in **Table 6-2**, with total suspended particulates (TSP) data adopted from other sources.

Table 6-2: Background Air Quality Summary – Chullora AQMS (2020)

Pollutant	Averaging Period	Units	Measured Value	Notes
Particles (as TSP)	Annual	µg/m ³	42.2	Estimated on a TSP:PM ₁₀ ratio of 2.0551:1
Particles (as PM ₁₀)	24-hour	µg/m ³	Daily varying	The 24-hour maximum for PM ₁₀ concentration in 2020 was 167.9 µg/m ³
	Annual	µg/m ³	20.5	
Particles (as PM _{2.5})	24-hour	µg/m ³	Daily varying	The 24-hour maximum for PM _{2.5} concentration in 2020 was 86.2 µg/m ³
	Annual	µg/m ³	8.8	

For the purposes of this assessment, existing odour concentrations have been assumed to be negligible.

The site is located within an area which has a relatively flat surface terrain with little height variation. In dispersion modelling terms, the topography is relatively uncomplicated and does not need to be explicitly accounted for in the dispersion modelling exercise.

6.1.2.3 Potential for Cumulative impacts

The site is located within an existing industrial estate, with a concrete batching plant (operated by Hanson) located approximately 170 m to the northeast, a number of smash repair facilities over 100 m to the north, and freight/logistics operations immediately to the west, and approximately 300 m to the west of Cosgrove Road, at the Enfield Intermodal Logistics Centre. No publicly available documentation could be found regarding potential air quality impacts associated with the abovementioned facilities. Accordingly, it was considered that the inclusion of background air quality data, as described in **Section 6.1.2.2** above, would appropriately account for any potential cumulative impacts associated with these surrounding land uses.

Strathfield Council has specifically requested that this EIS address the potential for cumulative impacts to occur as a result of the 'Aussie Skips' recycling operation at 84-108 Madeline Street. Accordingly, Northstar Air Quality Pty Ltd have reviewed the AQIA prepared by EMM in 2020 in support of a modification to DA 9899/452. The AQIA included a dispersion modelling assessment of the receipt, unloading, processing, storage and load-out of building and demolition waste.

In terms of incremental impacts (i.e. due to the operation of the Aussie Skips facility alone), the AQIA predicted maximum 24-hour PM₁₀ impacts of 20.7 µg·m⁻³ at industrial receptors (representing 41 % of the criterion), and 12.7 µg·m⁻³ at residential receptors (representing 25 % of the criterion). The AQIA prepared for the Project presents incremental concentrations significantly less than those predicted in the EMM Report even based on

conservative assumptions.

The EMM Report concluded:

“The predicted incremental air quality impacts from facility operations with the proposed enclosure are below all applicable assessment criteria at all surrounding assessment locations for both peak day and average day operations. When background air quality conditions are accounted for, operational emissions from the facility are unlikely to result in additional cumulative exceedances of impact assessment criteria at any surrounding residential or recreational location.

Between one and two additional exceedance days were predicted for 24-hour average PM₁₀ at two neighbouring industrial assessment locations, however these predicted exceedances are not considered significant for the following reasons:

- the background concentration on these exceedances was elevated relative to the impact assessment criterion and contributed more than 92% of the total cumulative concentration;*
- the exceedances are based on the continual assumption of peak day operational emissions on every day of the calendar year modelling period; and*
- the two industrial assessment locations with exceedances are an operational recycling facility and an operational automotive spray-painting facility.”*

The likelihood of peak day operations at both facilities coinciding is minimal and incremental impacts associated with the Project are demonstrated to be low. Cumulative impacts, although possible, are therefore considered to be unlikely.

6.1.3 Impact Assessment

During the operation of the Project, the following activities are anticipated to result in potential emissions to air:

- Wheel-generated particulate emissions from the operation of the trucks and other site vehicles on paved road surfaces;
- Particulate emissions from the unloading and loading of materials from trucks;
- Particulate emissions from materials handling (sorting) and processing; and
- Odour from a minor quantity of contaminated materials.

6.1.3.1 Odour

The incoming waste received at the site is not highly odorous in nature and would not contain putrescible waste. However, it is reasonable to assume that a fraction (i.e. less than 5%) of incoming waste may be odorous by nature of residual materials left on recyclable material, such as residues of food present in recyclable food containers.

A quantitative assessment of potential odour impacts that could occur should 5% of waste from the commingled recyclables stream be contaminated by putrescible residues has therefore been performed.

Dispersion modelling results indicate that the proposed operations at the site can be performed without giving rise to offensive odour at nearby sensitive receptor locations.

The predicted incremental concentrations of odour are demonstrated to be minor under both current operations and following the proposed expansion.

6.1.3.2 Particulate Matter

The predicted annual average particulate matter concentrations (as TSP, PM₁₀ and PM_{2.5}) resulting from the operations at the site were assessed.

An exceedance of the annual average PM_{2.5} criteria is shown, although this is dominated by elevated background levels which are already 110% of the criterion.

No contour plots of annual average TSP, PM₁₀ or PM_{2.5} are presented, given the minor contribution from the Project at the nearest relevant sensitive receptors.

The assessment also considered dust deposition as a result of the operations at the site. The results indicate minor incremental impacts at all surrounding receptor locations, and compliance with the relevant criterion.

No contour plot of annual average dust deposition was provided, given the minor contribution from the Project at the nearest sensitive receptors.

The maximum 24-hour average PM₁₀ and PM_{2.5} concentrations predicted to occur at the nearest sensitive receptors as a result of the operation of the Project (in isolation from the background) were assessed and are predicted to be low and within criteria.

Maximum 24-hour average PM₁₀ and PM_{2.5} concentrations resulting from the operation of the Project were also assessed with background included. It was noted that a number of exceedances are indicated in the 'background' air quality data, due to regional air quality episodes. The results show that for both PM₁₀ and PM_{2.5}, the operation of the Project and the approved development is not predicted to result in any additional exceedances of the criteria at any other receptor location.

Contour plots of the predicted maximum incremental 24-hour average PM₁₀ concentrations resulting from the Project are presented in **Figure 6-2**.

6.1.3.3 Conclusion

The results of the assessment indicate that all air quality criteria are predicted to be achieved. Modelled concentrations associated with the operation of the Project and the approved development at nearby receptors are minimal and would not result in any additional exceedances of the air quality criteria. Exceedances of the annual average PM₁₀ and PM_{2.5} criterion is dominated by the already exceeding background conditions. The contribution of the Project and the approved development to that exceedance is minimal.

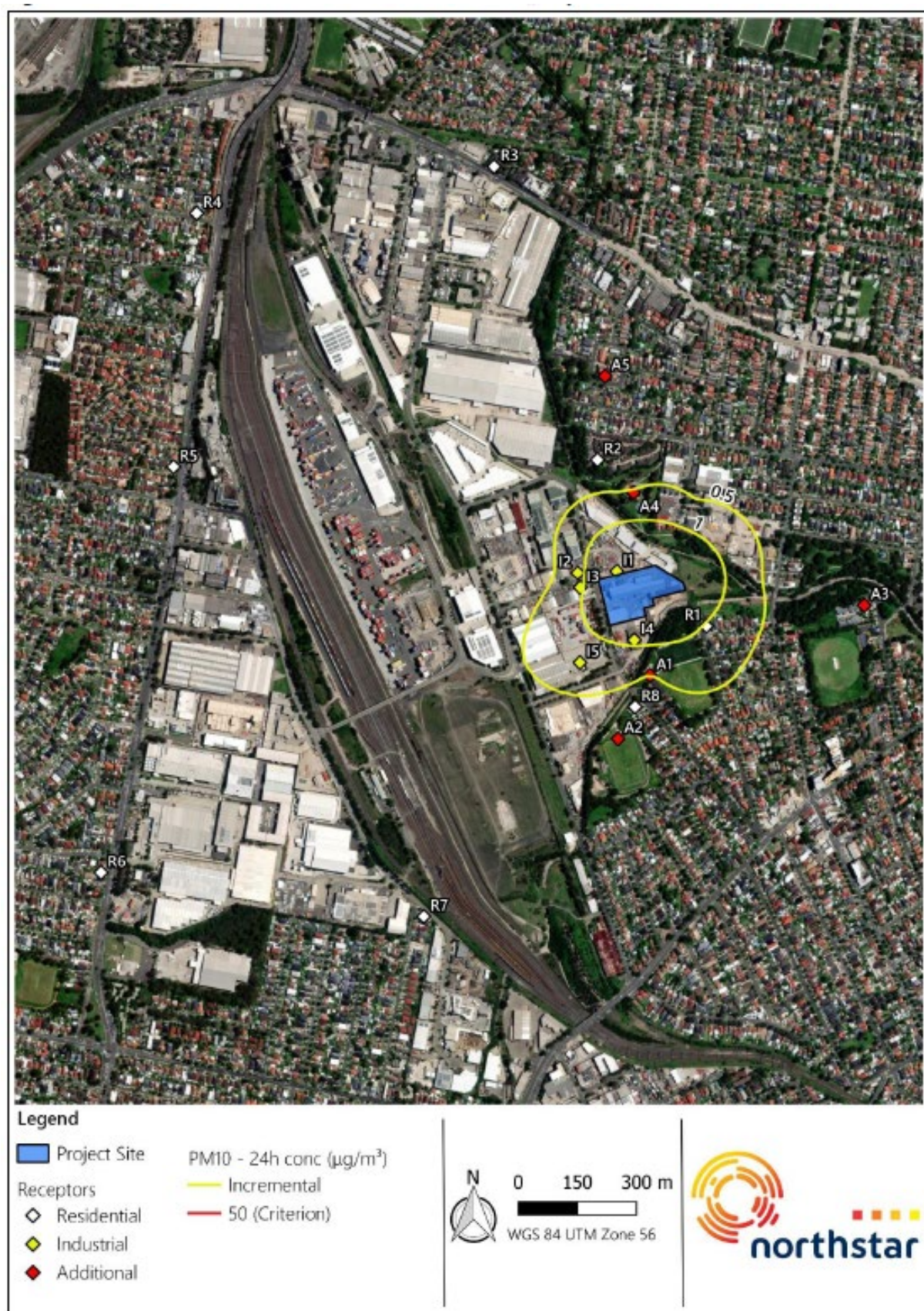
6.1.4 Mitigation Measures

A number of emissions control measures are currently adopted at the site and have been considered as part of the dispersion modelling assessment. The results of the AQIA indicate that implementation of those control measures will continue to ensure that air quality (including odour) impacts at adjacent receptor locations are minimised.

The adopted emissions control measures comprise:

- Keeping building doors closed when possible, to reduce the egress of uncontrolled emissions;
- Ensuring the dust capture system and baghouses are operating effectively and are maintained to reduce emissions associated with the material recycling process;
- Storing baled product and glass cullet in enclosed areas; and
- Limiting vehicle speeds on site to 5 km/hr.

Given the findings of the AQIA presented above, no air quality monitoring is required or proposed.

Figure 6-2: Predicted Maximum Incremental 24-hour PM_{10} Impacts

Source: Northstar

6.2 Noise and Vibration

A detailed Noise and Vibration Impact Assessment (NVIA) has been prepared for the Project by Waves Acoustic Consulting Pty Ltd (Waves Consulting). The NVIA report is provided in full in **Appendix E** and is summarised below.

The purpose of the report is to assess the potential noise and vibration impacts of the Project at all nearby sensitive receivers and to identify measures to mitigate impacts, where required.

The report has been prepared having regard to relevant assessment guidelines and reference documents, including:

- *NSW Noise Policy for Industry 2017 (NPI)*, NSW EPA;
- *NSW Road Noise Policy 2011 (RNP)*, NSW EPA;
- *Assessing Vibration: A Technical Guideline*, NSW DEC 2009; and
- DA 2015/177 as modified.

6.2.1 Existing Environment

There are two residential zones located to the north-east and south-east of the site. Given the large number of residential receivers surrounding the site, it was appropriate to group the receivers into Noise Catchment Areas (NCAs). The NCAs were defined to reflect the different background noise levels affecting each of these areas (i.e. the receivers in each NCA will have similar background noise levels). The NCAs are shown in **Figure 6-3**.

Figure 6-3: Noise Catchment Areas and Noise Logging Locations



Table 6-3 describes the nearest noise sensitive receivers surrounding the development site.

Table 6-3: Nearest Noise Sensitive Receivers

Receiver Type	Description	Distance (m)	Direction
Active Recreation ¹	Cooke Park	100	South
	Begnell Field	280	South
	Barks Hut Reserve	360	South-east
Passive Recreation ¹	Ford Park	300	East
	Dean Reserve	180	North
Industrial	-	5	North
	-	180	East
	-	5	South
	-	35	West
Residential	NCA01 Williams Street (closest)	235	North-east
	NCA02 Chisholm Street (closest)	75	South-east

Note:1. Distance taken to the reasonably most affected point not unduly influenced by other nearby industrial sources or arterial roads.

The potential operational noise impacts associated with the Project include the following:

- Processing operations from Buildings 1, 2 & 3;
- Front end loader and forklift movements around the site handling and moving materials and loading/unloading delivery trucks;
- Delivery trucks moving on the site;
- Delivery trucks loading / unloading on the site;
- Fixed outdoor sources such as the generator associated with Building 3 and the dual air compressors associated with Building 1; and
- Additional noise emissions from vehicle movements on the adjacent roads to any nearby sensitive receivers.

The potential for vibration impacts is effectively nil given the offset distances between sources of vibration and sensitive receivers.

6.2.2 Methodology

6.2.2.1 Environmental Noise Measurements

To characterise the existing acoustic environment in the area, several environmental noise level surveys were carried out. Two noise loggers (unattended measurements) were used to continuously record the ambient noise levels in each NCA. The logger locations are shown in **Figure 6-3**.

Table 6-4 presents the rating background noise levels (RBLs) recorded during the day, evening and nighttime assessment periods for both NCAs.

Table 6-4: Rating Background Noise Levels for each NCA

NCA	L _{AF90} Background Noise Levels		
	Day	Evening	Night
NCA01	43	41	38
NCA02	54	44	39

Attended noise measurements were also undertaken at a number of locations which assist in identifying the various noise sources that influence the existing noise environment.

The environmental noise in the area is typically dominated by industrial noise, urban hum, local road traffic on nearby Chisholm Street and active recreation at nearby Cooke Park during the evening periods.

6.2.2.2 NSW Noise Policy for Industry

The *NSW Noise Policy for Industry* (NPI) sets out the procedure for determining the *project noise trigger levels* (PNTLs) relevant to a particular industrial development. The PNTL is a level that, if exceeded, would indicate a potential noise impact on the community and so trigger a management response e.g. mitigation measures. The PNTL is the lower (i.e. more stringent) value of the *project intrusiveness noise level* and the *project amenity noise level*.

Table 6-5 presents the overall PNTLs for the project for each receiver catchment.

The background noise levels and PNTLs from this assessment were compared against the historical noise impact assessment carried out for the site by SLR Consulting in November 2015.

The current assessment has the same or lower RBLs for all periods except for NCA02 during the daytime period, which shows a +6 dB increase in the background noise levels. This is most likely attributed to the redevelopment and use of the site to the south (i.e. 84 Madeline Street – Aussie Skips), which has significantly changed the noise environment. This is the same when comparing PNTLs, where there is a 5 dB increase for NCA02 during the daytime leading to a PNTL of 59dB.

To provide the most conservative assessment and to acknowledge the historical Noise Impact Assessment at this site, the PNTL for NCA02 adopted for the assessment as per the historical Noise Impact Assessment i.e. a PNTL of 53 dB LAeq.

Table 6-5: NPI Project Noise Trigger Levels

Receiver	Time of day	Project Noise Trigger Levels		
		PNTLs LAeq,15min	Sleep Disturbance LAeq,15min dB(A)	Sleep Disturbance LAFMax
NCA01 Urban Residential	Day	48	-	-
	Evening	46	-	-
	Night	43	43	53
NCA02 Urban Residential	Day	53	-	-
	Evening	48	-	-
	Night	53	44	54
Active Recreation	When in Use	53	-	-
Passive Recreation	When in Use	48	-	-
Commercial	All	53	-	-
Industrial	All	68	-	-

Note 1. RANL = Recommended Amenity Noise Level, as per Table 2.2 of the NPI.

Note 2. RBL = Rating Background Level

Note 3. For Monday to Saturday, Day= 0700 to 1800 hrs, Evening= 1800 to 2200 hrs, Night= 2200 to 0700 hrs.
For Sundays and Public Holidays, Day= 0800 to 1800 hrs, Evening= 1800 to 2200 hrs, Night= 2200 to 0800 hrs.

6.2.2.3 NSW Road Noise Policy

The *NSW Road Noise Policy* (RNP) provides a framework for assessing and mitigating the impacts of traffic noise. The RNP criteria applicable to this development are given in **Table 6-6**.

Where the existing noise levels due to traffic already exceed the assessment criteria, the RNP requires that the increase in traffic noise levels due to additional traffic generated by new developments should be limited to 2 decibels (dB).

Table 6-6: RNP Road Traffic Noise Criteria for Residential Land Uses

Road Category	Type of Project / Land Use	External Assessment Criteria (dB re 20 µPa)	
		LAeq,15hr (Day)	LAeq,9hr (Night)
Freeway/Arterial/Sub-arterial	Existing residences affected by additional traffic on existing freeways / arterial / sub-arterial roads generated by land use developments	60 LAeq,15hr (Day)	55 LAeq,9hr (Night)
Local		55 LAeq,1hr (Day)	50 LAeq,1hr (Night)

6.2.2.4 Operational Noise Modelling

Noise modelling of the site was undertaken using SoundPLAN v7.4 modelling software, to calculate noise levels at all nearby noise sensitive receivers.

Noise model predictions were performed using noise enhancing meteorological conditions given in the NPI (refer EME Advisory

to Table 20 of the NVIA). For all conditions, the worst-case wind direction (source to receiver) for each receiver was assessed, in order to provide a conservative prediction of the potential noise impacts from the development. Similarly, corrections for annoying noise characteristics (such as low frequency noise, intermittent noise and tonal noise) were assessed as part of the NVIA (refer to Section 6.5 of the NVIA), on the basis that where a noise source exhibits certain characteristics, there is evidence to suggest it can cause greater annoyance than other noise at the same noise level.

Development Consent DA 2015/177, as modified, requires a number of noise control measures to be implemented on-site, as per the conditions of consent. In recent years the environmental/site conditions have changed significantly, including:

- New site enclosure for the adjacent site to the south (84 Madeline Street – Aussie Skips);
- The noise wall on the adjacent site to the south (84 Madeline Street – Aussie Skips) has increased in height from 4.5m to 8.5m. The length of the wall has also increased significantly (refer to **Figure 6-4**);
- The compressors associated with Building 1 have been full enclosed inside a heavy-duty acoustic enclosure; and
- Implementation of 'Alternative Noise Control Measures' on the Re.Cycle site following approval of Modification 4 in February 2025.

Figure 6-4: Changes to the Extent of the Existing Noise Wall at 84 Madeline Street.



Note: The orange line shows the extent of the new noise wall at 8.5m height.

These alternative noise mitigation measures have been fully implemented on site and are included in the noise modelling for the Project and are detailed in **Table 6-7**.

Table 6-7: Summary of Alternative Noise Control Measures

ID	Location	Previous Mitigation Recommendations	Alternative Mitigation Due to Changed Site Conditions	Status
MM01	Building 1	Close all access doors during the evening and night-time	No change	Ongoing operational mitigation
MM02		Install a noise wall around the air compressors adjacent to the southern wall of Building 1. The	Air compressors now completely enclosed inside an acoustic enclosure. This mitigation measure has been	Completed

ID	Location	Previous Mitigation Recommendations	Alternative Mitigation Due to Changed Site Conditions	Status
		noise wall should be 0.5 m above the height of the existing compressor roof structure and the internal face of the noise wall should be lined with an acoustic material with an NRC of not less than 0.75.	installed on site.	
MM03		Line the underside of the roof above the air compressors with an acoustic material with an NRC of not less than 0.75.	Air compressors now completely enclosed inside an acoustic enclosure. This mitigation measure has been installed on site.	Completed
MM04		During the night-time reduce the duty of the air compressors to 80%.	No change.	Ongoing operational mitigation
MM05		Install a minimum of 1500 sqm of acoustic material on the inside of the building, to line the walls and the upper part of the walls. The lining should provide an NRC of not less than 0.75.	No longer required as noise emissions from Building 2 have been reduced due to the improved building facade / cladding.	No longer required
MM06		Review and repair all facade and roof elements. All gaps, cracks and damaged facade elements should be made good.	No change.	Complete
MM07		Close all access doors except for doors H & I during the evening and night-time.	No change.	Ongoing operational mitigation
MM08	Building 2	Increase the noise wall to the East of Building 2 to 5.5 m. The internal face of the noise wall should be lined with an acoustic material with an NRC of not less than 0.75. The noise wall should also be extended to wrap around the southern boundary of the site to connect with the corner of Building 2.	Do not increase the noise wall height but keep the internal face lining with acoustic material with NRC not less than 0.75. Extend the existing noise wall at 4.5 m to wrap around the southern boundary to connect to Building 2.	Complete
MM09		Install a minimum of 1000 sqm of acoustic material on the inside of the building, to line the walls and the upper part of the walls. The lining should provide an NRC of not less than 0.75.	No longer required as noise emissions from the site have been reduced due to the changes at the adjacent Aussie Skips site.	Not required
MM10		Review and repair all facade and roof elements. All gaps, cracks and damaged facade elements should be made good.	No change.	Complete

ID	Location	Previous Mitigation Recommendations	Alternative Mitigation Due to Changed Site Conditions	Status
MM11	Building 3	Remove the generator that operates adjacent to Building 3.	No change.	Complete
MM12		Review and repair all facade and roof elements. All gaps, cracks and damaged facade elements should be made good.	No change.	Complete
MM13	Dust Extraction Fans (adjacent to Building 1)	Operate dust extraction fans with an exhaust silencer, so the overall Sound Power Level of each fan is no greater than 97 dB LwA as per Table 4.	No change.	Complete

Overall the effect of noise emissions from the site on residential receivers have been reduced due to:

- Construction of a large building / enclosure across most of the adjacent site providing a shielding effect;
- Additional shielding provided by the increase in height and length of the noise wall on the adjacent site;
- Air compressors now fully enclosed in a heavy duty acoustic enclosure; and
- Implementation of Alternative Noise Mitigation Measures following approval of Modification 4 in February 2025.

6.2.3 Impact Assessment

6.2.3.1 Predicted Operational Noise Impacts (With Mitigation) - NPI

The predicted worst-case operational noise levels due to on-site noise sources (with the alternative mitigation measures) have been assessed and compared against the PTNLs and sleep disturbance targets. In addition, noise contour maps showing how the noise emissions from the Project propagate into the surrounding environment have been provided are provided in **Figure 6-5** and **Figure 6-6**. A detailed table showing the outcomes of the assessment by receptor location is provided in Table 24 of **Appendix E**.

The results demonstrate that with the proposed alternative mitigation measures, the predicted noise emissions from the site to the surrounding environment are low and satisfy the PNTLs and sleep disturbance targets at all nearby receivers during all time periods. The PTNLs at all other nearby noise sensitive receivers, such as active/passive recreational areas, commercial and industrial receivers are also satisfied.

Figure 6-5 Daytime Operational Noise Levels

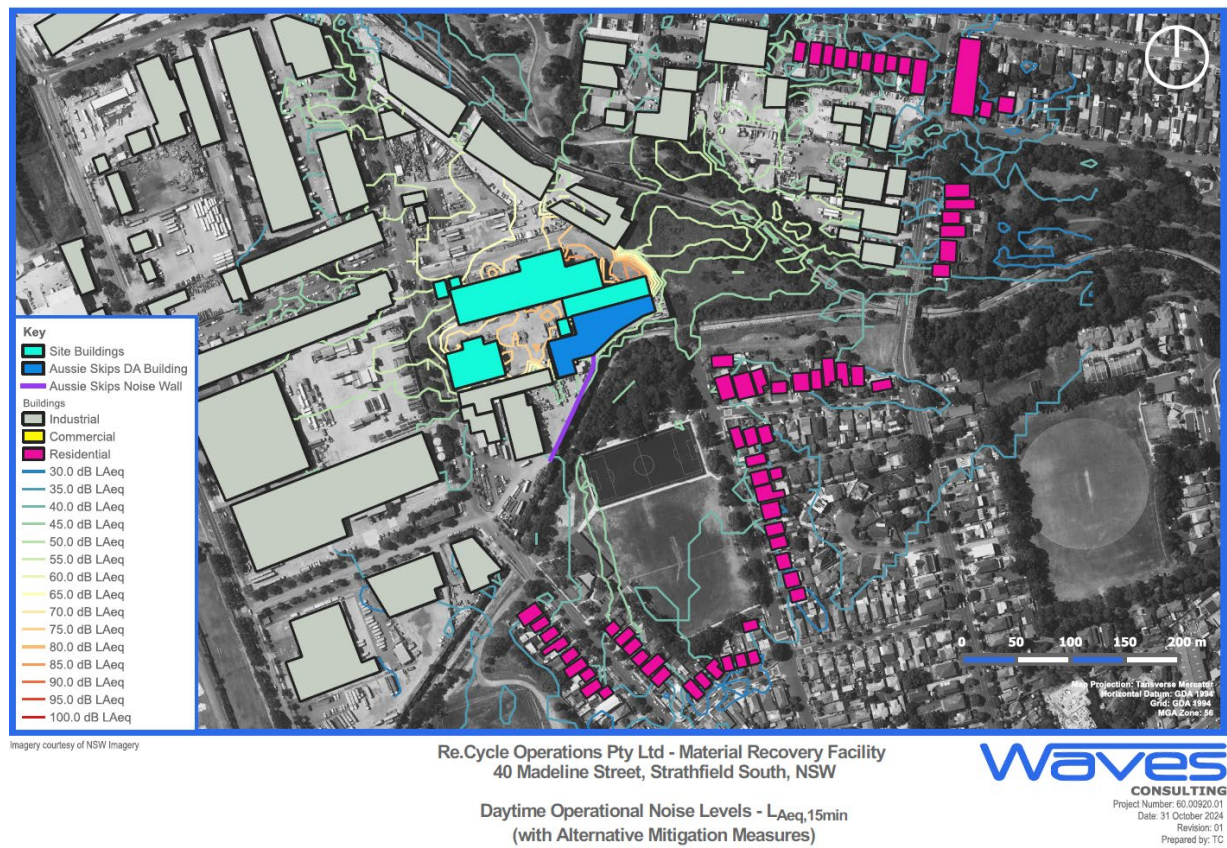
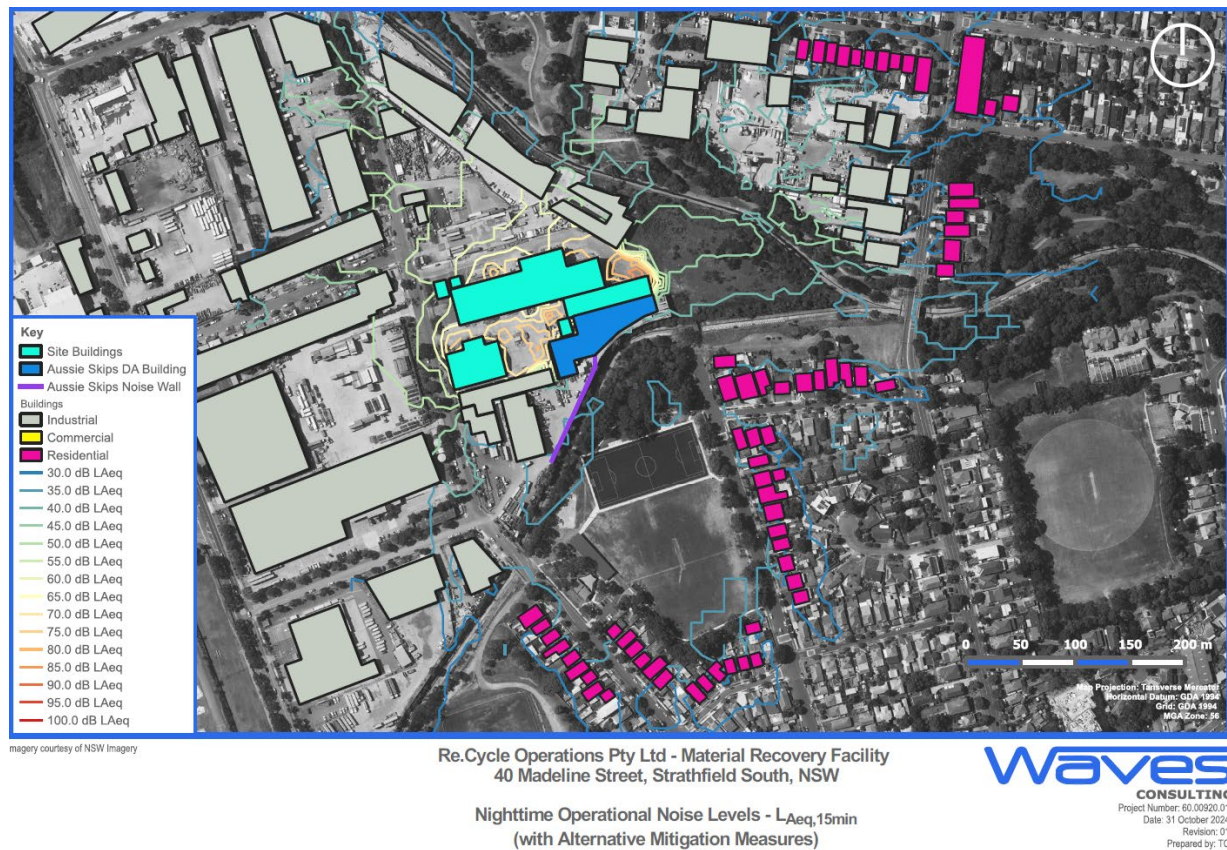


Figure 6-6 Night Time Operational Noise Levels



6.2.3.2 Predicted Traffic Noise Impacts - RNP

Traffic to and from the site will use the following roads:

- Madeline Street
- Cosgrove Road
- Punchbowl Road
- Liverpool Road

To calculate the predicted noise impacts generated by the Project, the existing road traffic volumes for these roads was sourced from the NSW Traffic Volume Viewer website and historical traffic reports, as appropriate.

Table 6-8 summarises the existing traffic noise levels on the affected roads.

Table 6-8: Existing Traffic Noise Levels on Surrounding Roads

Road	Distance to Nearest Residential Receiver (m)	Existing Traffic				RNP Criteria (LAeqdB)	Exceed-ance Yes/No	Comment
		Time Period	Daily Volume	% Heavy Vehicles	Road Traffic Noise Level			
Cosgrove Road	7	Day	5514	13	>60	60	Yes	RNP criteria exceeded. Project must not exceed 2dB increase.
		Night	379	13	>55	55	Yes	
Punchbowl Road	13	Day	32104	0.4	>60	60	Yes	RNP criteria exceeded. Project must not exceed 2dB increase.
		Night	2049	0.4	>55	55	Yes	
Liverpool Road	26	Day	47456	4	>60	60	Yes	RNP criteria exceeded. Project must not exceed 2dB increase.
		Night	3029	4	>55	55	Yes	

All the potentially affected roads show existing traffic noise levels which are above the RNP criteria. Therefore, the traffic noise increases on these roads due to the additional traffic generated by the Project should not exceed 2 dB to remain compliant.

Table 6-9 summarises the predicted increase in traffic noise due to the additional traffic generated by the Project.

The results show that the additional traffic noise will be negligible and well within the 2 dB increase criteria. The RNP criteria will therefore be satisfied. As a result, no mitigation measures are required.

Table 6-9: Traffic Noise Increases due to Project

Road	Existing Traffic			Increase in Traffic (due to Project)		Increase in Noise Levels (dB)
	Time Period	Daily Volume	% Heavy Vehicles	Daily Volume	% Heavy Vehicles	
Cosgrove Road	Day	5514	13	5567	14	0.2
	Night	379	13	397	16	0.7
Punchbowl Road	Day	32104	0.4	32157	0.5	0.0
	Night	2049	0.4	2067	1.1	0.3
Liverpool Road	Day	47456	4	47509	4	0.0
	Night	3029	4	3047	4	0.0

6.2.4 Mitigation Measures

Overall, the Project (with the proposed alternative noise mitigation measures listed in **Table 6-7**) is compliant with the NPI and RNP noise targets during all time periods at all nearby receivers. Accordingly, no additional noise mitigation measures are required beyond those already implemented/proposed.

6.3 Traffic and Transport

A detailed Traffic Impact Assessment (TIA) has been prepared for the Project and is provided in **Appendix F**. The TIA presents an assessment of potential impacts of the Project on traffic, access and on-site maneuverability.

6.3.1 Methodology

The TIA has been prepared with reference to relevant NSW legislation, guidelines and assessment documents, including:

- *Guide to Traffic Impact Assessment (Transport for NSW, 2024)*
- *Australian Standard 2890.1:2004 – Parking facilities - Off-street car parking*
- *Australian Standard 2890.2:2018 – Parking facilities - Off-street commercial vehicle facilities.*

6.3.2 Existing Environment

6.3.2.1 Traffic assessment for DA 2015/177

DA 2015/177 obtained development consent to increase paper and cardboard recycling from 20,000 tpa to 30,000 tpa and to receive and process 69,900 tpa of mixed metals, glass and mixed plastics.

The traffic impact assessment provided in support of the DA noted the following traffic movements associated with the application:

- 78 trucks in / out per day for material delivery;

- 14 trucks in / out per day for material load out; and
- 9-14 light vehicles in / out per day for staff.

6.3.2.2 Existing Road Network

The existing road hierarchy in the vicinity of the site is shown in **Figure 6-7** and a description of key roads and their classification is provided in **Table 6-10** below.

Table 6-10: Road Network Overview

Road Name	Classification	Description
Hume Highway (HW 2)	Highway	A highway that generally runs in a north-south direction and connects the Great Western Highway in Ashfield in the east and the Victorian border in the south. In the vicinity of the site, the Hume Highway is also known as Liverpool Road and is subject to a 60km/h speed zoning. It generally consists of three traffic lanes in either direction separated by a median and does not permit any form of on-street parking.
Punchbowl Road (MR 549)	Main Road	A main road that traverses east to west between Coronation Parade in the east and Canterbury Road in the west. It is subject to a 60km/h speed zoning and carries two (2) lanes of traffic in each direction within an undivided carriageway. No parking is permitted along either side of the road.
Cosgrove Road (RR 7062)	Unclassified Regional Road	An unclassified regional road that traverses in a north-south direction between the Hume Highway in the north and Punchbowl Road in the south. It is subject to a 60km/h speed zoning and carries a single lane of traffic in each direction. Unrestricted kerbside parking is generally permitted along either side of the road.
Madeline Street	Local Road	A local road that runs in a north-south direction between Cleveland Street and Chisholm Street. It is subject to a 50km/h speed zoning in the vicinity of the site and carries a single lane of traffic in either direction. Unrestricted kerbside parking is generally permitted along either side of the road.

6.3.2.3 Key Intersections

The key intersections in the vicinity of the site are as follows:

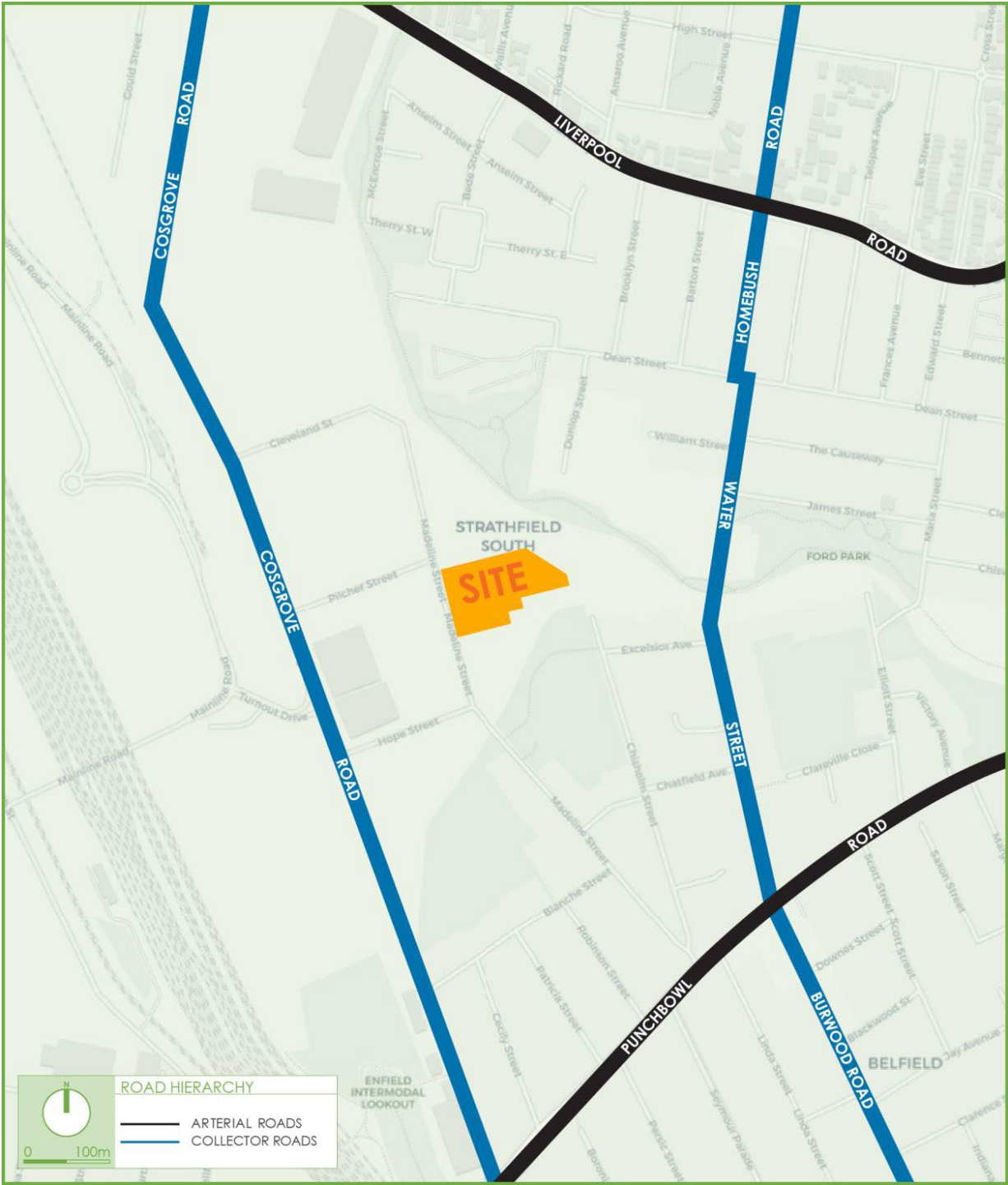
- the intersection of Cosgrove Road and Cleveland Street; and
- the intersection of Cosgrove Road and Hope Street.

Analysis shows both these intersections currently operate with a level of service (LoS) A.

6.3.2.4 Public Transport

The site is located within 400m of two (2) bus stops serviced by the 450 route. This service provides connection to Strathfield Railway Station and travels between Strathfield and Hurstville.

Figure 6-7: Existing Road Hierarchy



6.3.3 Impact Assessment

6.3.3.1 Traffic Generation

Noting the existing approved use of the site, only the net change in staff numbers and truck volumes has been considered in the assessment.

It is estimated the Project will result in the following additional daily trips to and from the site:

- 58 truck trips associated with material delivering to the site (29 in, 29 out);
- 13 truck trips associated with collecting and transporting processed material from the site (7 in, 6 out); and
- 12 light vehicle trips associated with the 6 additional staff (6 in, 6 out).

Assuming that all six (6) additional staff arrive during the AM peak hour (highly conservative), the following traffic generation is anticipated:

- 6 light vehicle trips during the AM peak hour (6 in, 0 out).

Assuming that all trucks delivering materials to the site (58 heavy vehicles) arrive in the critical five-hour morning period (between 5am-10am) and applying a peak hour factor of 1.5, the AM peak hour trucks trips are anticipated to be as follows:

- 18 truck trips during the AM peak hour (9 in, 9 out).

The combined traffic generation due to the proposed development is therefore estimated to be 24 vehicle trips during the AM peak hour (15 in, 9 out).

As the Project will not generate any additional traffic during the evening peak hour, this has not been assessed.

6.3.3.2 Truck Routes

The truck routes aim to avoid residential areas and direct trucks to and from Liverpool Road and Punchbowl Road (both arterial roads), thereby minimising impacts in the area.

It is noted that Madeline Street, Hope Street and Cleveland Street are approved 25/26m B-Double routes. Cosgrove Road is an approved truck route, subject to certain conditions, as follows:

- travel between 6:00am-7:00pm only;
- access by right turn only from Liverpool Road to Cosgrove Road; and
- exit via right turn only to Punchbowl Road.

The truck routes are shown in **Figure 6-8** and **Figure 6-9**.

Figure 6-8: Truck Routes between 4am-6am

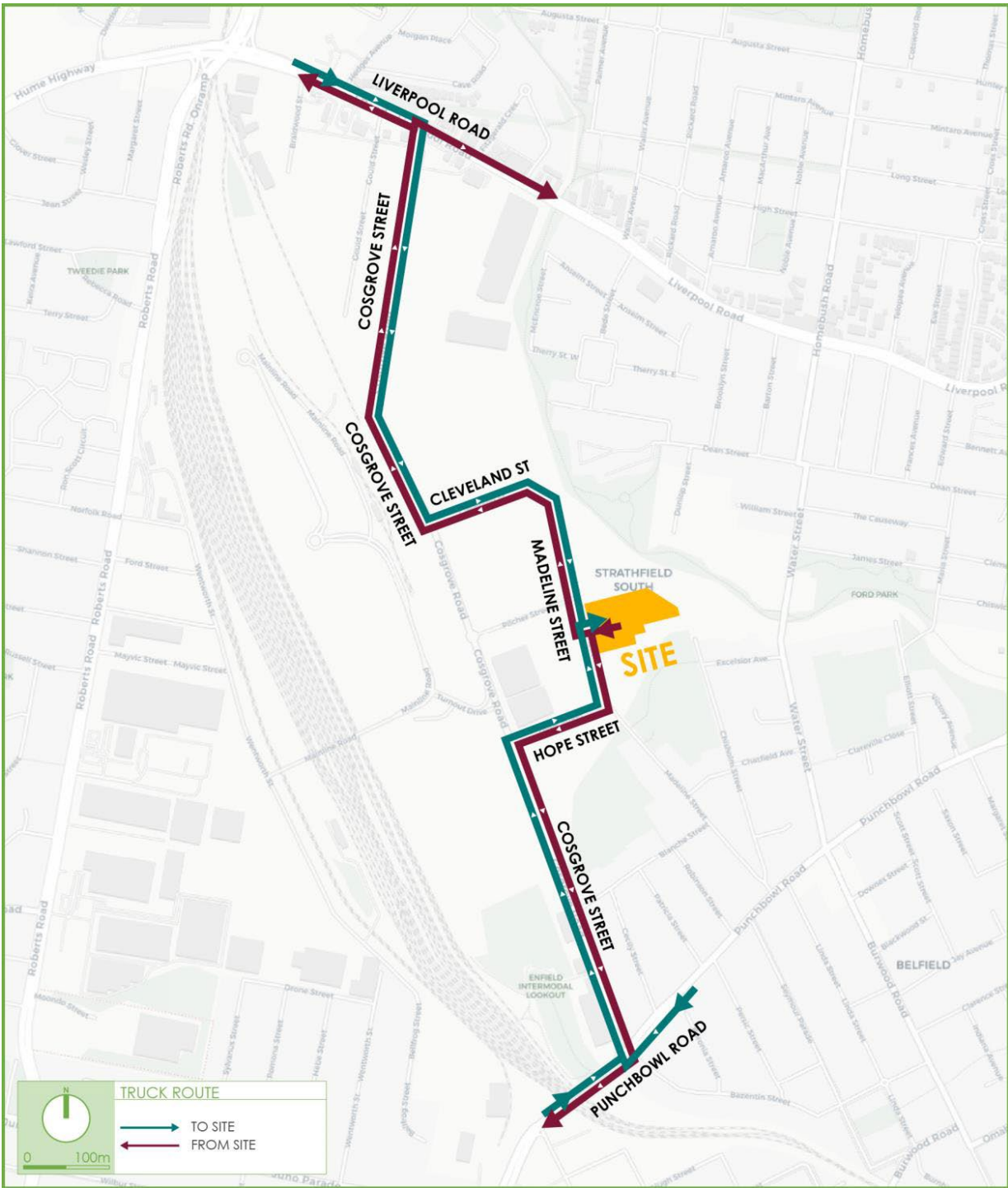
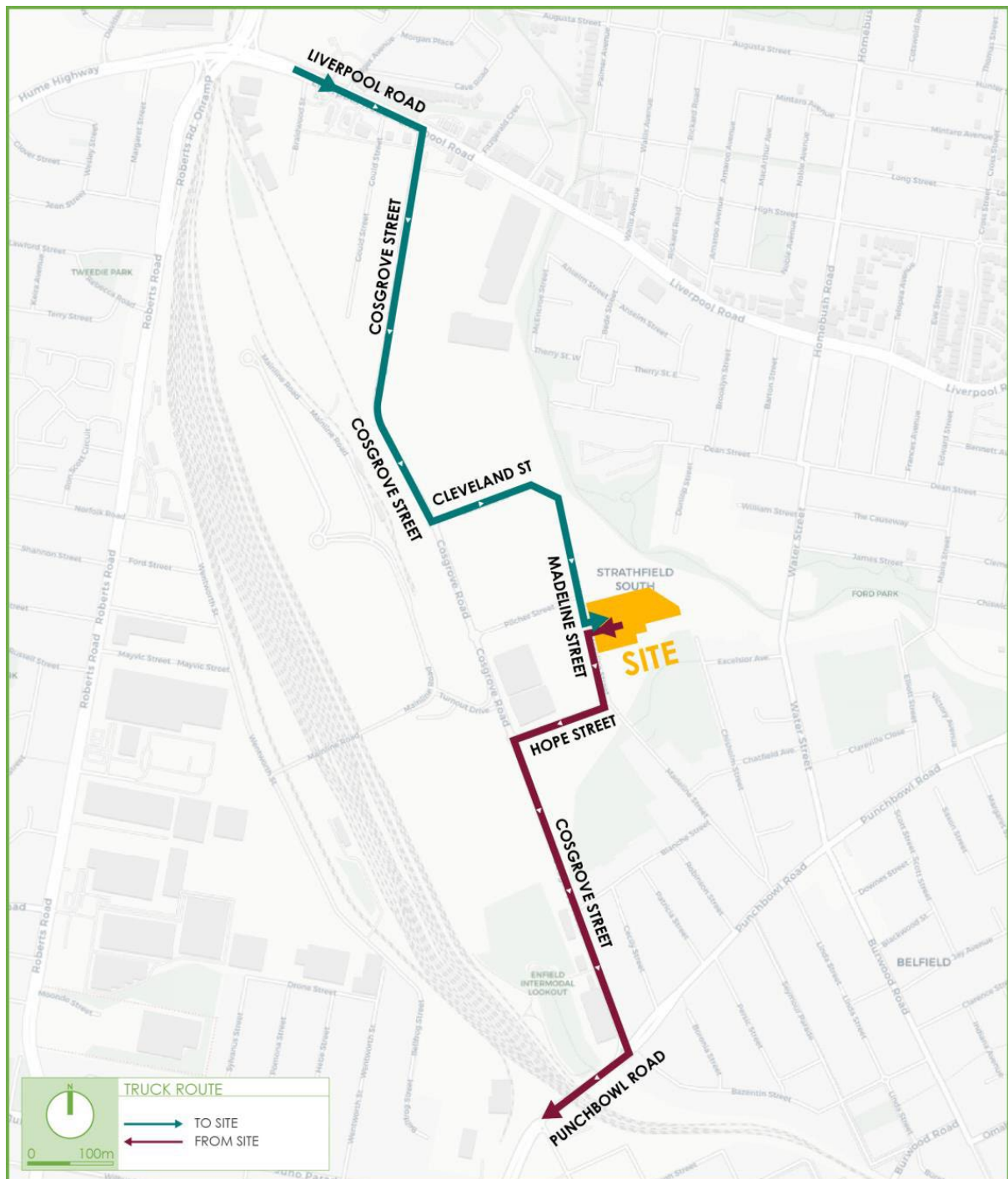


Figure 6-9: Truck Routes Between 6am-7pm



6.3.3.3 Intersection Performance

For the purposes of assessing the impacts of the Project on intersection performance, peak period traffic surveys were conducted at the following critical intersections within proximity of the site:

- the intersection of Cosgrove Road and Cleveland Street; and
- the intersection of Cosgrove Road and Hope Street.

The adopted trip distribution of traffic onto the surrounding road network is summarised in **Table 6-11**.

Table 6-11: Trip Distribution

Direction	Inbound Movements		Outbound Movements	
Vehicle Type	Light Vehicle	Heavy Vehicle	Light Vehicle	Heavy Vehicle
Arrives/departs north on Hume Highway via Cosgrove Road, Cleveland Street and Madeline Street	50%	100%	50%	0%
Arrives/departs south on Punchbowl Road via Cosgrove Road, Hope Street and Madeline Street	50%	0%	50%	100%

To assess the potential traffic impacts of the Project, the following scenarios were identified:

- Existing scenario;
- Existing scenario + Project.

The traffic surveys were analysed using the *SIDRA Intersection 9* computer program to determine the intersection performance characteristics. A summary of the modelling results is provided in **Table 6-12**.

Table 6-12: SIDRA Intersection Modelling Results

Intersection	Control Type	Scenario	Period	Degree of Saturation (DoS)	Average Vehicle Delay (secs)	Level of Service (LoS)
Cosgrove Road and Cleveland Road	Roundabout	Existing	AM	0.378	10.0	A
		Existing + Development		0.378	10.0	A
Cosgrove Road and Hope Street	Roundabout	Existing	AM	0.366	8.9	A
		Existing + Development		0.368	9.1	A

The results indicate that the intersection of Cosgrove Road and Cleveland Road will experience no change to the average vehicle delay (AVD) under the development scenario, while the intersection of Cosgrove Road and Hope Street will experience an increased delay of 0.2 seconds. Both intersections will continue to operate at LoS A.

No external infrastructure improvements (intersection upgrades) are required to accommodate the proposed development.

6.3.3.4 Access and Internal Circulation

Heavy vehicle access to the site is currently provided from Madeline Street, via two (2) separate access driveways. No changes are proposed to the existing approved and operational vehicular access arrangements for the site.

No changes are proposed to the existing weighbridge arrangement, on-site loading or car parking areas. All of

the existing internal circulation design aspects have been assessed and approved under a previous DA. The facility will continue to operate as it does currently, with the largest size vehicles accessing the site being B-Doubles. Accordingly, no additional swept path analysis is required.

All queuing will be accommodated within the site. All truck arrivals to and from the site will be scheduled to ensure that no on-street queuing occurs. Trucks will only arrive to site when the weighbridge is available for use. These management measures can be managed internally by staff in accordance with an approved Traffic Management Plan.

6.3.3.5 Parking

Part I of the *Strathfield Consolidated Development Control Plan 2005* (DCP) states the off-street car parking requirements for industry uses as follows:

- 1 space per 55m² GFA (where the office component is less than 20% of the floor area); or 1 space per 2 employees whichever provides the greater number of spaces.
- 1 space per 55m² GFA (excluding office); plus 1 space per 40m² GFA of office (when the office component is over 20% of the total floor area); or 1 space per 2 employees whichever provides the greater number of spaces.

As no increase in floor area is proposed, only the increase in the number of employees has been considered in determining the off-street car parking requirements for the site. The Project will generate an additional six (6) full-time positions, which results in a requirement for the provision of 3 additional off-street car parking spaces, in accordance with the DCP.

The existing development consent provides for a total of 29 car parking spaces and a maximum of 24 employees permitted to be present on the site at any one time.

Currently, the facility operates on a rotating two-shift basis, so that there is a maximum of 18 employees present on the site at any one time (i.e. four office staff and 14 personnel working in the MRF and the PCR facility per shift).

Under the Project, there will be a maximum of 21 employees present on the site at any one time (i.e. four office staff and 17 personnel working in the MRF and the PCR facility per shift). Accordingly, the existing off-street car parking provision is considered sufficient to accommodate the proposed development.

The existing approved car parking arrangements provide a single accessible car parking space. As no changes are proposed to the existing car parking arrangement, no additional accessible parking is proposed.

6.3.3.6 Cumulative Impacts

Applying the criteria set out in the *Cumulative Impact Assessment Guidelines for State Significant Projects* (DPHI, 2022), a review of the NSW Major Projects Planning Portal identified two State Significant Projects in the vicinity of the subject site. These projects are identified in **Table 6-13** below.

Table 6-13: Nearby Major Projects

Application No.	Type	Address	Project	Status
MP05_0147-Mod-15	SSI Modification	127 Cosgrove Road, Strathfield South	Re-use Tarpaulin Factory as a Garden Centre	Approved 22/11/2023

Application No.	Type	Address	Project	Status
SSD-67497708	SSD Application	13 Bellfrog Street, Greenacre	Increase capacity of existing Waste Facility to 250,000 tpa	Response to Submissions

A review of the above projects has been undertaken to determine the potential cumulative traffic impacts of these developments, combined with the Project, on the operation of the road transport network.

MP05_0147-Mod-15 is an approved development for a garden and retail centre on the corner of Punchbowl Road and Cosgrove Road. The development, when operational, will utilise the Punchbowl Road / Cosgrove Road and Liverpool Road / Cosgrove Road intersections. A review of the TIA report submitted with the SSI modification application found that these key intersections will continue to operate at an acceptable LoS. In addition, DPHI's assessment report states that *"the proposed modification will have minor impacts on the surrounding street traffic network"*.

SSD-67497708 is an SSD project involving an increase in the processing capacity of an existing waste management facility, which received SEARS in March 2024 and during this EIS preparation was at Response to Submissions stage. The TIA report confirms that the site is accessed via Mainline Road, Bellfrog Street-Wentworth Street-Norfolk Road and Roberts which are different access roads to those utilised by the Project, so that the likelihood of any cumulative traffic impacts is small.

As discussed above, the amount of additional traffic likely to be generated by the Project is considered minor and would occur largely during the AM peak period. Therefore, given the level of traffic expected to be generated by the Project, combined with that predicted for the approved development at 127 Cosgrove Road, it is considered that any cumulative traffic impacts on the surrounding road network will be minimal and within acceptable limits.

6.3.4 Mitigation Measures

Given the above findings, no new traffic mitigation measures are required or proposed beyond those already incorporated in the design.

6.4 Fire and Incident Management

6.4.1 Methodology

A Fire Incident Management Plan (FIMP) has been prepared in response to the Fire Incident Management SEARs and is provided in **Appendix G**. The FIMP assesses the potential fire risks associated with the proposed development and reviews the adequacy of proposed fire safety measures, based on those risks. The FIMP includes consideration of the consistency of the proposed development with the FRNSW's Fire Safety Guideline – *Fire Safety in Waste Facilities* (FRNSW, 2020).

The following methodology was used in the preparation of the FIMP and follows the methodology provided in *Hazardous Industry Planning Advisory Paper No. 2 – Fire Safety Study Guidelines* (HIPAP No. 2):

- Fire hazards were identified to determine whether any fire or explosion hazards exist that may impact off-site or have the potential to escalate. Where such hazards were identified, these were carried forward for consequence assessment.
- The heat radiation impacts or overpressure impacts (consequences) from each of the postulated incidents were then estimated and potential impacts on surrounding areas assessed.
- Impacts were plotted on a site layout plan, to determine whether heat radiation would impact any critical areas (i.e. adjacent storage areas, fire services, safety systems, etc) and whether such impact would affect the ability of firefighters to respond to the postulated fire. Heat radiation impacts from incidents at adjacent sites on the buildings and structures at the MRF facility were also assessed against the maximum permissible levels in *Hazardous Industry Planning Advisory Paper No. 4 - Risk Criteria for Land Use Safety Planning* (HIPAP No. 4).
- The adequacy of existing firefighting strategies was reviewed to determine whether these strategies need to be updated to accommodate the proposed development.
- The response times for FRNSW stations in the immediate vicinity of the site were assessed. In addition, response times from further outlying FRNSW stations were assessed, so as to provide a 'backup plan' in the event that the closest fire brigades were unable to attend.

6.4.2 Existing Environment

The land is located in an existing industrial precinct and is zoned E4 - General Industrial under the *Strathfield Local Environmental Plan 2012*.

The site is surrounded by the following land uses:

- North – a civil construction depot and a multi-unit industrial facility comprising multiple operators;
- South - a multi-unit industrial facility with multiple operators and a waste transfer/recycling facility;
- East - vacant land; and
- West – a transport and logistics facility and a smallgoods food provider.

The closest residential/public recreation zones are located approximately 70m from the site. A search of the NSW Rural Fire Service's bush fire prone land online mapping tool indicates that the site is not bushfire prone land.

The maximum quantities of waste proposed to be stored on-site are shown in **Table 6-14**.

Table 6-14: Aggregate Quantities of Waste Materials Stored and Handled On-site

Storage/Handling Context	Waste Material	Current Quantity	Approved Additional Quantity	Proposed Additional Quantity	Total Quantity
Maximum quantity received/handled per annum	Mixed metals (steel/tin/aluminium), glass & mixed plastics	69,900 tpa		100,100 tpa	170,000 tpa
	Paper/cardboard	30,000 tpa		Nil	30,000 tpa
Maximum quantity permitted on-site at any one time	Mixed metals, mixed plastics, glass & paper/cardboard	4,200 T		3,800 T	8,000 T

The combustion properties of waste materials are described in **Table 6-15**.

Table 6-15: Combustion Properties of Waste Materials

Material	Combustion Properties
Glass	Glass is inherently non-combustible.
Metals	Metal scraps such as steel, iron, copper, brass, or stainless steel will melt when exposed to heat but typical temperatures within a fire will not result in the combustion of these metals.
Plastics	Some plastics are combustible depending on the composition.
Paper/Cardboard	Paper/cardboard are combustible, however, when stored in tightly bound bales, the spread of ignition is dramatically reduced.

6.4.3 Impact Assessment

6.4.3.1 Hazard Identification

Potential fire hazards were identified to determine whether any fire or explosion hazards exist that may impact off-site or have the potential to escalate.

The main hazard identified was the potential ignition of combustible waste in the MRF Receival Hall. Commingled recyclables are delivered to the site and unloaded in the enclosed Receival Hall in Building 2, prior to being sorted and sent into different streams. The incoming waste is variable in nature and may contain contaminants such as gas bottles, aerosol canisters or lithium-ion batteries, which may result in the release of flammable gas (in the case of gas bottles and aerosols), or thermal runaway of the lithium-ion batteries. Either source may result in ignition and fire at the point of release, which could then propagate into a waste storage fire.

Building 2 is fitted with smoke detectors and infra-red screening. If a fire were to propagate, the smoke detectors would detect the presence of smoke in the early phases of fire growth and site staff and FRNSW would be alerted accordingly.

6.4.3.2 Fire Protection Measures

The following fire safety measures are/will be implemented at the site to deal with potential fire hazards.

6.4.3.2.1 Fire detection

In the event of a fire at the facility, the existing fire detection system will detect the presence of the fire via aspirated smoke detectors. The system will activate alarms to notify building occupants and FRNSW. Manual alarm points should also be installed in clearly visible and accessible locations, such that staff can initiate early alarms.

6.4.3.2.2 Fire protection

Extinguishers

Portable fire extinguishers will be provided in accordance with Clause E1D14 of the National Construction Code (NCC), and the relevant provisions of AS2444:2001. In addition, the FIMP recommends that:

- Dry powder extinguishers shall be available be within 15 m of combustible waste storages.
- Operators shall be trained in the use of site fire extinguishers.

Fire Hydrants

It is expected that up to three (3) hydrant hoses will be required to operate at the site in the event of a fire. A pressure inquiry indicates for 30 L/s demand for three hydrant hoses, the available pressure is 294 kPa. However, pressure losses exist in the system; hence, in the scenario where three hoses are operating the pressure losses from pipework, valves, and fittings may result in the available pressure at the most disadvantaged hydrant not being sufficient to exceed 250 kPa.

Given the above, the FIMP recommends that:

- The existing fire hydrant system shall be reviewed by a fire protection engineer to confirm the number of hydrants that would be required to flow at the site and to demonstrate that the available pressure at the most disadvantaged hydrant will comply with AS2419.1.

Fire Hose Reels

A fire hose reel system is provided in accordance with Clause E1D3 of the NCC, and the relevant provisions of AS2441:2005. The FSA notes that the current layout is considered acceptable, as the existing glass beneficiation process will remain unchanged and there will be no additional combustible materials.

Sprinklers

The FRNSW Fire Safety Guideline – *Fire Safety in Waste Facilities* recommends automatic fire sprinkler systems be installed in any fire compartment that has a floor area of 1,000m² and contains combustible material. As the GBP processes non-combustible materials, there is no requirement for a sprinkler system.

6.4.3.2.3 Fire mitigation

Fire Water Supply

The street mains provide an adequate fire water supply to the site hydrants. However, as previously discussed, the existing hydrant system should be reviewed by a fire protection engineer to confirm the number of hydrants that would be required to flow at the site and to demonstrate that the available pressure at the most disadvantaged hydrant will comply with AS2419.1.

Fire Brigade Access

The closest FRNSW station to the site is the FRNSW Headquarters located at Greenacre, approximately 3.6

kilometres away. The estimated arrival time of the FRNSW brigade at the site is 17.5 minutes after the initial fire ignition. Fire vehicles are able to gain direct access to the site from Madeline Street.

6.4.3.3 NCC Fire Protection Requirements

In addition to the above, the NCC specifies further fire protection requirements. These requirements are summarised in **Table 6-16**.

Table 6-16: NCC Fire Protection Requirements

NCC Clause	Requirement
E1D2 Fire Hydrants	A fire hydrant system shall be provided in accordance with Clause E1D2 and would be designed to AS2419.1:2021.
E1D3 Fire Hose Reels	A fire hose reel system shall be provided in accordance with Clause E1D3 and the relevant provisions of AS2441:2005.
E1D4 Sprinklers	An automatic fire sprinkler system shall be provided in accordance with Clause E1D3 and would be designed to AS2118.1-2017.
E1D14 Portable Fire Extinguishers	Portable fire extinguishers shall be provided in accordance with Clause E1D14 and the relevant provisions of AS2444:2001.
S20C4 Smoke Detection	A smoke detection system shall be provided in accordance with Specification 20C4 and AS1670.1:2018.
E2D3 Building Occupant Warning System	A building occupant warning system shall be provided in accordance with E2D3 and AS1670.1:2018.
E4D2, E4D4 Emergency Lighting and E4D5, E4D6, E4D8 Exit Signs	Emergency lighting and exit signs shall be provided in accordance with Clauses E4D2, E4D4, E4D5, E4D6 and E4D8 and the relevant provisions of AS2293.1:2005.

6.4.3.4 Assessment against FRNSW Guidelines

The FSA includes a detailed review of the Project's consistency with FRNSW's Fire Safety Guideline – *Fire Safety in Waste Facilities* (refer to **Appendix G**).

The findings of the review indicate that the Project is capable of satisfying all of the FRNSW's requirements, subject to the implementation of the proposed mitigation measures identified in **Section 0**.

6.4.3.5 Contaminated fire water

In the event of a fire within the building, water used to suppress the fire may be contaminated through contact with the products of combustion (noting the waste materials stored on site are relatively benign). The total volumes and flow of fire water has been estimated at 432 m³ and 1.8 m³ per minute respectively, based on operation of three hydrants for four hours. Options to contain this volume of water on site are limited given the developed and constrained nature of the site.

The site stormwater management includes gross pollutant traps which provides for filtering of run-off through the patented Storm Filter cartridge to remove a range of pollutants to meet stringent regulatory requirements, including total suspended solids, hydrocarbons, nutrients, soluble heavy metals, oil and grease, and organics. The system is located within an underground tank in the northwest of the site before being discharged into the Cooks River. There is no current way of containing the water to be assessed post-fire prior to release.

The Stormwater 360 filtration pit system has a designed water-quality treatment flow rate of 1.86 m³/min and a peak flow capacity of 5.16 m³/min. As the system is capable of effectively filtering contaminated water at 1.86 m³/min, it is expected to manage the anticipated contaminated fire water flow of 1.8 m³/min. On this basis, additional containment is not considered necessary, as the system would drain and treat the fire water at a rate equal to or greater than the application rate in the worst-case fire scenario.

Given this, the measures in place provide a risk-proportionate treatment method, even though the system does not allow for post-fire segregation or batch testing prior to release.

Given the facility's approval under NCC 2016 and the fact that the NSW Fire Safety in Waste Facilities Guideline did not apply at the time (issued in 2020), requirements for large-scale containment must be considered through a performance-based, risk-focused lens. In this context, retrofitting such infrastructure is neither practicable nor proportionate to the environmental risk presented, particularly within the site's constrained footprint. Accordingly, the existing stormwater treatment arrangement is considered appropriate and commensurate with the risk and represents a suitable management measure for this facility.

6.4.4 Mitigation Measures

Based on the above assessment, the FIMP makes the following recommendations:

- The site shall have a security fence and will be staffed during business hours.
- CCTV monitoring should be provided to detect intruders at the site.
- Where possible, storages at the site shall alternate between combustible and non-combustible products to minimise the potential for incident propagation between storages.
- Dry powder extinguishers shall be available within 15m of combustible waste storages.
- Operators shall be trained in the use of site fire extinguishers.
- A fire hydrant system shall comply with Clause E1D2 of the NCC and the relevant provisions of AS2419.1:2021.
- A fire hose reel system shall comply with Clause E1D3 of the NCC and the relevant provisions of AS2441:2005.
- Portable fire extinguishers shall comply with Clause E1D14 of the NCC and the relevant provisions of AS2444:2001.
- A building occupant warning system shall comply with the NCC Clause E2D3 and AS1670.1:2018.
- An Emergency Response Plan (ERP) shall be developed for the site in accordance with HIPAP No.2.
- An Emergency Service Information pack (ESIP) shall be developed for the site in accordance with the FRNSW Fire Safety Guideline - *Emergency Service Information Package and Tactical Fire Plans*.
- Identify a designed smoking area at the site and provide this on the site layout.
- Develop a hot work permit system to control any hot work undertaken at the site.
- The hydrant system shall be reviewed by a fire protection engineer to confirm the number of hydrants that would be required to flow at the site and to demonstrate that the available pressure at the most disadvantaged hydrant will comply with AS2419.1.

- Maintenance of the stormwater filtration pit to provide suitable fire water filtration including replacement of the filters following a fire water incident.

In addition to the above mitigation measures, the following fire risk management measures have been or are in the process of being implemented on the site including:

- ‘Fire Rover’ technology: a globally proven fire detection and suppression response system to manage fire risks at recycling facilities.
- Open-area Smoke Imaging Detection (OSID): dual wavelength beam detection devices for use in high dust environments.

6.5 Hazards and Risk

This section provides detailed consideration of whether the Project is a ‘potentially hazardous industry’, and therefore subject to assessment under Chapter 3 of *State Environmental Planning Policy (Resilience and Hazards) 2021* (Resilience and Hazards SEPP).

A preliminary risk screening has been completed by Riskcon Engineering, in accordance with the provisions of the Resilience and Hazards SEPP and the document *Applying SEPP 33: Hazardous and Offensive Development Application Guidelines* (DoP, 2011) (Applying SEPP 33) and is provided in **Appendix H**.

6.5.1 Methodology

Chapter 3 of the Resilience and Hazards SEPP applies to any Projects which fall under the policy’s definition of ‘potentially hazardous industry’. The policy defines ‘potentially hazardous industry’ as:

“a development for the purposes of any industry which, if the development were to operate without employing any measures (including, for example, isolation from existing or likely future development on other land) to reduce or minimise its impact in the locality or on the existing or likely future development on other land, would pose a significant risk in relation to the locality—

(a) to human health, life or property, or

(b) to the biophysical environment,

and includes a hazardous industry and a hazardous storage establishment.”

For development Projects classified as ‘potentially hazardous industry’, a preliminary hazard analysis (PHA) must be undertaken to determine the risk to people, property and the environment at the proposed location and in the presence of controls.

Applying SEPP 33 has been prepared to provide advice on interpreting and implementing SEPP-RH. The guidelines include a screening method, based on the quantities of hazardous materials stored or used on a site in relation to the distance from publicly accessible areas. The classifications of hazardous materials, as defined in the *Australian Code for the Transport of Dangerous Goods by Road and Rail* (National Transport Commission 2007), commonly referred to as the Dangerous Goods Code, serve as the basis for the criteria used in *Applying SEPP 33*. In the event the threshold levels are exceeded, the Resilience and Hazards SEPP applies and a PHA must be undertaken.

The methodology used in Riskcon Engineering’s preliminary risk screening involved:

- Reviewing the types and proposed quantities of DGs to be stored at the site;

- Comparing the quantities of DGs with the threshold quantities listed in *Applying SEPP 33* to identify whether the storage locations or quantities trigger the Resilience and Hazards SEPP;
- Reviewing the likely vehicular movements involving DGs and comparing against the applicable thresholds set out in *Applying SEPP 33*; and
- Reporting on the findings of the assessment.

6.5.2 Resilience and Hazards SEPP Assessment

The maximum quantities of DGs proposed to be stored at the site are listed in **Table 6-17**.

Table 6-17: Classes and Quantities of DGs Stored and Handled

Storage/Handling Context	Class	Description	PG	Current Approved Quantity	Proposed Additional Quantity	Total
Maximum quantities processed (handled) on-site per annum.	N/A	Materials Received (Glass, Plastic and Metal waste).	N/A	69,900 tpa	100,100 tpa	170,000 tpa
	N/A	Paper/Cardboard.	N/A	30,000 tpa	No addition proposed.	30,000tpa
Maximum quantities stored on-site at any one time.	N/A	Waste Storage (plastics, metals, papers/cardboards and glass).	N/A	4,200 T	3,800 T	8,000 T

6.5.2.1 Storage of Glass

Glass is not subject to assessment under the Resilience and Hazards SEPP. This is due to the glass being a non-combustible, non-toxic material and does not present a significant hazard to the surrounding land uses. As the facility is increasing the processing intake of glass and subsequently storing the glass product in containment areas, the risk of fire is negligible. The increased throughput does not involve the storage of additional chemicals and DGs required for the processing stage due to the process being primarily mechanical driven.

Glass is solid and relatively dense, and since the process line is highly successful at removing glass dust, it is very unlikely that any product will disperse into and impact the surrounding environment. Therefore, the subsequent off-site impacts are expected to be negligible. As glass is non-combustible and does not present any toxic impacts, the risks are very low and the increase of glass storage and processing onsite would not lead to a significantly increased potential impact on the surrounding environment.

6.5.2.2 Storage of Waste

The waste materials to be stored on-site are not subject to assessment under the SEPP. This is because they are non-flammable and non-toxic materials, presenting no significant hazard to the surrounding land uses. Paper, cardboard, and plastic are combustible materials, which pose a potential fire risk, if ignited. The waste products are sorted and bundled into compact units for storage outside, before being transported to a different facility for further processing. Since the waste is held by the facility for a limited time and is stored in an orderly and compact manner, the risk of combustion is low, and subsequent off-site impacts are expected to be negligible.

6.5.2.3 Transport of Hazardous Material

The current transportation arrangements at the site are acceptable and do not require amendment. The additional material is to be unloaded/loaded as it is currently. As the material is not classed as a DG, there is no applicable SEPP screening threshold. Hence, there are no specific limits to vehicular movements associated with the delivery and removal of additional material at the site. Further, the additional six light vehicles entering the employee carpark each day will not encroach on any stores of DGs and are not subject to transportation screening thresholds specified in the Resilience and Hazards SEPP. The inherent risk is considered to be negligible. Therefore, as the transportation screening thresholds of the SEPP will not be exceeded, the SEPP does not apply.

6.5.2.4 Conclusion

A review of the quantities of DGs to be stored at the MRF and the associated vehicle movements was conducted and compared to the threshold quantities set out in *Applying SEPP 33*. The results of this analysis indicate the threshold quantities for DGs to be stored and transported will not be exceeded. Therefore, the Project is not classified as a 'potentially hazardous industry' and Chapter 3 of the Resilience and Hazards SEPP does not apply.

6.5.3 Mitigation Measures

Given the above findings, no new mitigation measures in relation to hazard and risk are required or proposed.

6.6 Greenhouse Gas and Energy Efficiency

Northstar Air Quality Pty Ltd was commissioned to undertake a greenhouse gas (GHG) assessment to support the SSD application. The GHG assessment provides a quantitative assessment of likely GHG emissions arising from the operation of the Project and compares these totals with national and State GHG emissions for context. Opportunities for reduction of GHG emissions are also identified. The report is provided in full in **Appendix D**.

6.6.1 Methodology

The GHG accounting and reporting principles adopted in the GHG assessment are based on the following financial accounting and reporting standards:

- *Australian National Greenhouse Accounts Factors Workbook 2023* (Australian Government Department of Climate Change, Energy, the Environment and Water, 2023), (the NGA Factors Workbook);
- *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard* (World Resources Institute and World Business Council for Sustainable Development, 2004), (the GHG Protocol);
- ISO 14064-1:2018 (Greenhouse Gases – Part 1: Specification with guidance at the organisation level for quantification and reporting of GHG emissions and removal);
- ISO 14064-2:2019 (Greenhouse Gases – Part 2: Specification with guidance at the project level for quantification, monitoring and reporting of GHG emission reductions or removal enhancements); and
- ISO 14064-3:2019 (Greenhouse Gases – Part 3: Specification with guidance for the validation and verification of GHG assertions) guidelines (internationally accepted best practice).

6.6.1.1 Emission Types

The NGA Factors Workbook defines two types of GHG emissions, namely 'direct' and 'indirect' emissions (see **Table 6-18**). The assessment considers both 'direct' and 'indirect' emissions resulting from the operation of the

Project.

Table 6-18: Greenhouse Gas Emission Types

Emission Type	Definition
Direct	Produced from sources within the boundary of an organisation and as a result of that organisation's activities (e.g. consumption of fuel in on-site vehicles).
Indirect	Generated in the wider economy as a consequence of an organisations' activities (particularly from its demand for goods and services), but which are physically produced by the activities of another organisation (e.g. consumption of purchased electricity).

6.6.1.2 Emission Scopes

The NGA Factors workbook identifies two 'scopes' of emissions for GHG accounting and reporting purposes, as summarised in **Table 6-19**.

Table 6-19: Greenhouse Gas Emission Scopes

Emission Scope	Definition
Scope 1	Direct (or point-source) emission factors give the kilograms of carbon dioxide equivalent (CO ₂ -e) emitted per unit of activity at the point of emission release (i.e. fuel use, energy use, manufacturing process activity, mining activity, on-site waste disposal etc). These factors are used to calculate Scope 1 emissions.
Scope 2	Indirect emission factors are used to calculate Scope 2 emissions from the generation of the electricity purchased and consumed by an organisation as kilograms of CO ₂ -e per unit of electricity consumed. Scope 2 emissions are physically produced by the burning of fuels (coal, natural gas etc.) at the power station.

Note: Adapted from the NGA Factors Workbook (DCCEEW, 2023)

Scope 3 emissions are also recognised in some GHG assessments. The GHG Protocol defines Scope 3 emissions as follows:

"Scope 3 is an optional reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company but occur from sources not owned or controlled by the company. Some examples of Scope 3 activities are extraction and production of purchased materials, transportation of purchased fuels, and use of sold products and services."

Scope 3 emissions, such as the use of fuels in employee transport, have also been considered in the GHG assessment.

6.6.1.3 Emission Source Identification

The geographical boundary set for the GHG assessment covers the site and also includes the transport of material to, and from the site. All Scope 1, Scope 2 and Scope 3 emissions within the defined boundary have been identified and reported, as far as possible.

The GHG emission sources associated with the operation of the Project have been identified through a review of the proposed activities, as described in **Chapter 3** of this EIS. The activities/operations being performed as part of the Project which would have the potential to result in emissions of GHG are identified in **Table 6-20**.

Table 6-20: Greenhouse Gas Emission Sources

Emission Scope	Project Component	Emission Source Description
1	Consumption of diesel fuel in fixed and mobile plant and equipment at the site.	Emissions from combustion of fuel.
2	Consumption of electricity as part of Project operations.	Consumption of purchased electricity.
3	Consumption of diesel fuel/unleaded fuel for material transport purposes.	Emissions from combustion of fuel.
	Consumption of diesel fuel/unleaded fuel for employee transport purposes.	Emissions associated with the extraction and transport of fuel.

6.6.1.4 Emission Estimation

Emissions of GHG from the sources identified in **Table 6-20** above have been calculated using activity data for the source per annum (i.e. per kilolitre (kL) of diesel) and the relevant emission factor for each source.

The assumptions used in the calculation of activity data for the emission source and emission factors, are presented in the following sections.

6.6.1.5 Activity Data

The assumptions relating to activity (i.e. consumption) data are outlined in **Table 6-21**.

Table 6-21: Calculated Activity Data

Component	Assumptions	Activity	Units
Consumption of diesel fuel in fixed and mobile plant and equipment	Includes diesel consumption for whole site, including MRF, GBP and PCR	98.5	kL yr ⁻¹
Consumption of purchased electricity	Information provided by Proponent	600,000	kWh·yr ⁻¹
Consumption of diesel fuel/unleaded fuel for material transport purposes (outgoing)	- Outgoing material transport of 163 vehicles per year - Assumed transport distance within wider Sydney region (50 km radius) 8.7 kL·yr⁻¹ - Fuel usage for B-double truck of 53.1 L per 100 km	8.7	kL yr ⁻¹
Consumption of diesel fuel/unleaded fuel for material transport purposes (incoming)	- Incoming material delivery of 163 vehicles per year - Assumed transport distance within wider Sydney region (50 km radius) - Fuel usage for B-double and articulated trucks of 53.1 L per 100 km	8.7	kL yr ⁻¹
Consumption of diesel fuel/unleaded fuel for	19 full time employees	52.6	kL yr ⁻¹

Component	Assumptions	Activity	Units
employee transport purposes	- Assumed average commuting distance of 25 km one way - Fuel usage based on light vehicle consumption of 18.4 L per 100 km		

6.6.1.6 Emission Factors

Emission factors used for the assessment of GHG emissions associated with the operation of the Project have been sourced from the NGA Factors workbook as outlined in **Table 6-22**.

Table 6-22: Greenhouse Gas Emission Factors

Emission Scope	Emission Source	Emission Factor	Energy Content Factor
Scope 1	Diesel fuel for fixed and mobile plant and equipment and material transport	70.2 kg CO ₂ -e·GJ ⁻¹	38.6 GJ·kL ⁻¹
Scope 2	Consumption of purchased electricity (NSW)	0.73 kg CO ₂ -e kWh ⁻¹	-
Scope 3	Diesel fuel for mobile plant and equipment	17.3 kg CO ₂ -e·GJ ⁻¹	38.6 GJ·kL ⁻¹
	Unleaded fuel for employee transport	18 kg CO ₂ -e·GJ ⁻¹	34.2 GJ·kL ⁻¹
	Diesel fuel for material transport	17.3 kg CO ₂ -e·GJ ⁻¹	38.6 GJ·kL ⁻¹
	Consumption of purchased electricity (NSW)	0.06 kg CO ₂ -e kWh ⁻¹	-

6.6.2 Impact Assessment

6.6.2.1 Calculation of Emissions

Based on the activity data emission factors outlined above, **Table 6-23** presents the calculated Scope 1, 2 and 3 GHG emissions associated with operation of the Project.

Table 6-23: Greenhouse Gas Emissions

Emission Scope	Emission Source	Emission Factor	Energy Content Factor	Activity Rate	Emissions (tCO ₂ -e yr ⁻¹)
Scope 1	Diesel fuel for mobile plant and equipment	70.2 kg CO ₂ -e GJ ⁻¹	38.6 GJ·kL ⁻¹	98.5 kL·yr ⁻¹	266.9
Total Scope 1					266.9
Scope 2	Electricity	0.73 kg CO ₂ -e kWh ⁻¹	-		438
Total Scope 2					438

Emission Scope	Emission Source	Emission Factor	Energy Content Factor	Activity Rate	Emissions (tCO ₂ -e yr ⁻¹)
Scope 3	Diesel fuel for mobile plant and equipment	17.3 kg CO ₂ -e GJ ⁻¹	38.6 GJ·kL ⁻¹	98.5 kL·yr ⁻¹	65.8
	Diesel fuel for outgoing materials	17.3 kg CO ₂ -e GJ ⁻¹	38.6 GJ·kL ⁻¹	8.7 kL·yr ⁻¹	5.8
	Diesel fuel for incoming materials	17.3 kg CO ₂ -e GJ ⁻¹	38.6 GJ·kL ⁻¹	8.7 kL·yr ⁻¹	5.8
	Unleaded fuel for employee transport	18 kg CO ₂ -e GJ ⁻¹	34.2 GJ·kL ⁻¹	52.6 kL·yr ⁻¹	32.4
	Consumption of purchased electricity	0.06 kg CO ₂ -e kWh ⁻¹	-	600 000 kWh·yr ⁻¹	36.0
Total Scope 3					145.7

A summary of calculated emissions is presented in **Table 6-24**. Based on the production and throughput rates, the total annual GHG emissions (Scope 1, 2, and 3) are estimated to be 850.6 t CO₂-e.

Table 6-24: Summary of GHG Emissions

Emission Scope	Annual GHG Emissions (t CO ₂ -e yr ⁻¹)
Scope 1	266.9
Scope 2	438
Scope 3	145.7
TOTAL	850.6

6.6.2.2 Comparison with National Totals

A comparison of the calculated Scope 1 GHG emissions associated with the Project and NSW and Australia total emissions is presented in **Table 6-25**.

Table 6-25: Greenhouse Gas Emissions in Context

Emission Scope	Project total (t CO ₂ -e·yr ⁻¹)	Emissions (Mt CO ₂ -e yr ⁻¹)	
		Australia (2022) (excluding LULUCF)	NSW (2020)
		486.9 Mt	141.0 Mt
Scope 1	266.9	0.00005%	0.0002%

These data indicate that the operation of the Project would contribute up to 0.0002% of NSW total GHG emissions in 2020 and up to 0.00005% of Australia total GHG emissions in 2022.

6.6.3 Mitigation Measures

Emissions of GHG resulting from the Project will be minimised to the maximum extent practical by consideration

of the following measures:

- The most efficient vehicle and size will be used to minimise the number of trips required and minimise greenhouse gas (and particulate) emissions per tonne of material transported;
- All vehicle/plant and machinery will be turned off when not in use and be regularly serviced to ensure efficient operation, including the optimisation of tyre pressures;
- Truck routes and loading capacity will be designed to reduce the distance and effort required by the vehicles;
- Maintenance of internal roads in good condition to avoid meandering of vehicles;
- Where possible, B5 fuel will be used in plant and equipment; and
- Re.Cycle will endeavour, where possible, to use renewable energy sources, including solar power for power generation.

6.7 Social Impacts

A Social Impact Assessment (SIA) has been undertaken by bd Infrastructure. The purpose of the SIA is to identify, predict and evaluate likely social impacts arising from the Project. The SIA outlines the existing social baseline of the locality, assesses potential social impacts which may occur as a result of the Project and identifies measures to help manage or mitigate any impacts. The SIA is provided in full in **Appendix I** and is summarised below.

6.7.1 Methodology

The SIA has been prepared in accordance with the *Social Impact Assessment Guideline* (DPIE, 2023) (SIA Guideline) and the *Technical Supplement: Social Impact Assessment Guideline for State Significant Projects* (DPIE, 2023).

The SIA involved:

- Undertaking a social and economic baseline study to develop an understanding of the surrounding community, including residents, businesses, and services;
- Identifying local community values through engagement activities and review of relevant policies, plans and strategies;
- Evaluating potential social impacts and how they will be distributed, including consideration of impacts identified in other technical studies; and
- Identification of measures to manage and mitigate social impacts.

Impacts have been grouped according to the eight social impact assessment categories identified in the Guideline. These categories are:

- Way of life;
- Community;
- Accessibility;
- Culture;

- Health and wellbeing;
- Surroundings;
- Livelihoods; and
- Decision-making systems.

In accordance with the *Technical Supplement: Social Impact Assessment Guideline for State Significant Projects*, the likely significance of both positive and negative social impacts was assessed by considering the likelihood and magnitude of potential impacts using a standardised matrix approach (refer to **Table 6-26**).

Table 6-26: Matrix to Assess Significance of Social Impacts

Likelihood Level	Magnitude Level					
		1. Minimal	2. Minor	3. Moderate	4. Major	5. Transformational
	a. Almost certain	Low	Medium	High	Very high	Very high
	b. Likely	Low	Medium	High	High	Very high
	c. Possible	Low	Medium	Medium	High	High
	d. Unlikely	Low	Low	Medium	Medium	High
	e. Very unlikely	Low	Low	Low	Medium	Medium

Adapted from *Technical Supplement, Social Impact Assessment Guideline for State Significance Projects* (NSW Department of Planning, Industry and Environment, 2023).

The *social locality* for the SIA is defined as the area in which people are most likely to experience social impacts, including direct and indirect impacts, as a result of the Project. These people could include businesses, workers, residents, or visitors to the area. The *social locality* for the SIA includes the Strathfield South Statistical Area Level 2 (SA2) and the Belmore-Belfield SA2, as shown in **Figure 6-10**.

The SIA defines *region* as the broader area compared to the locality. It is the area in which people may experience indirect impacts as a result of the Project. The *region* for the SIA includes the Strathfield LGA. The Strathfield LGA has generally been considered in order to compare and analyse data from the *social locality*.

Figure 6-10: Social Locality



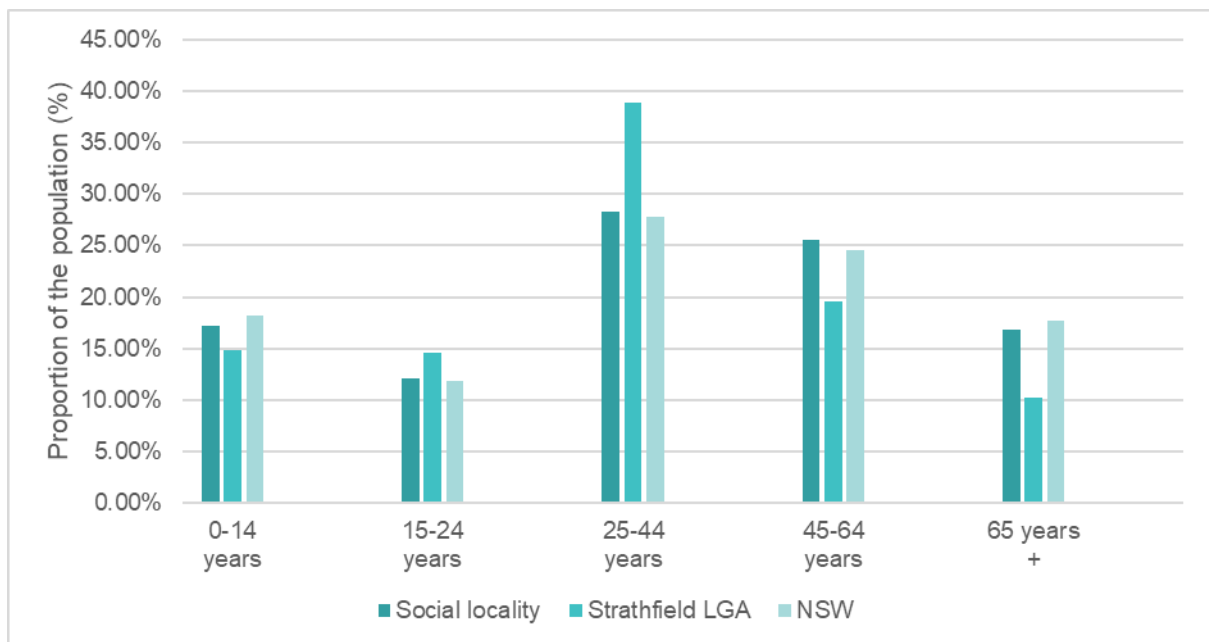
6.7.2 Existing Environment

At the 2021 Census, the social locality had a total resident population of 23,968 people, representing about 52.6 per cent of the population of the Strathfield LGA, which had a total resident population of 45,593 people.

The social locality had a slightly older age profile than the Strathfield LGA, with a median age of 38 years (South Strathfield SA2) and 39 years (Belmore-Belfield SA2) compared to 33 years (Strathfield LGA).

At the 2021 Census, the social locality had a higher proportion of children (0-14 years) and a higher proportion of people aged 45 years and over, compared to the Strathfield LGA (refer to **Figure 6-11**). This may indicate a potentially older resident population around the Project site.

Figure 6-11: Age Profile



At the 2021 Census, both the social locality and the Strathfield LGA had a lower proportion of Aboriginal and/or Torres Strait Islander residents compared to NSW, at about 0.5 per cent and about 0.4 per cent, respectively. Conversely, there was a higher level of cultural diversity when compared to NSW, with a higher proportion of residents born overseas (about 45.3 per cent, compared to 29.3 per cent). About 58.3 per cent of residents spoke a language other than English at home, compared to 26.6 per cent in NSW.

The social locality had a higher proportion of family households when compared to the Strathfield LGA and NSW. The Strathfield SA2 represented the highest proportion of family households, at about 76.5 per cent.

At the 2021 Census, the social locality had a higher proportion of dwellings owned outright or with a mortgage, compared to the Strathfield LGA (at about 58.0 per cent, compared to 50.5 per cent, respectively). This was lower than the NSW average, at 64.0 per cent.

For about 37.7 per cent of people living in the social locality, the primary method of travel to work was via car (as a driver or passenger), compared to 46.3 per cent of people in NSW.

At the 2021 Census, the five most common industries of employment within the social locality included:

- Health Care and Social Assistance, at 15.5 per cent;
- Retail Trade, at 9.7 per cent;

- Construction, at 8.8 per cent;
- Education and Training, at 8.8 per cent; and
- Professional, Scientific and Technical Services, at 7.7 per cent.

6.7.3 Impact Assessment

All identified social impacts (either positive or negative) associated with the Project have been assessed. These impacts have been grouped according to the categories set out in the SIA Guideline, as per the methodology outlined in **Section 6.7.1**.

6.7.3.1 Way of Life

The Project is expected to have the following impacts on way of life:

- Impacts to amenity and road safety due to increased truck movements
- Reduction in air quality due to increased truck movements
- Vibration and noise impacts from longer facility hours and extended operating hours
- Contributing to long-term sustainability initiatives and reducing waste diverted to landfill.

The significance ratings for the impacts of the Project on way of life during operation are summarised in **Table 6-27**.

Table 6-27: Summary of Impacts on Way of Life

Impact	Nature of Impact	Likelihood	Magnitude	Significance Rating
Impacts to amenity and road safety due to increased heavy vehicle movements	Negative	Possible	Minor	Medium
Reduction in the air quality due to increased heavy vehicle movements	Negative	Possible	Minor	Medium
Vibration and noise impacts from longer facility hours and extended operating hours	Negative	Possible	Moderate	Medium
Contributing to long-term sustainability initiatives and reducing waste diverted to landfill	Positive	Almost certain	n/a	Medium

6.7.3.2 Community

Community consultation results indicated support for the environment, parklands, clean open spaces and investing in local businesses.

The Project's potential impact on the community's natural environment was a focus for some people, including air quality and pollution concerns from the proposed extended operating hours. The significance rating for the impact of the Project on community during operation is summarised in **Table 6-28**.

Table 6-28: Summary of Impacts to Community

Impact	Nature of Impact	Likelihood	Magnitude	Significance Rating
Extended operating hours impacting on the natural environment	Negative	Possible	Minimal	Low

6.7.3.3 Accessibility

Consultation indicated that car use and road access are important for local residents, business and visitors, with bus transport used by a small proportion of residents in the social locality. The Project's potential impact on accessibility is summarised in **Table 6-29**.

Table 6-29: Summary of Impacts to Accessibility

Impact	Nature of Impact	Likelihood	Magnitude	Significance Rating
Increased traffic and congestion on local road networks impacting vehicle and active transport travel times for residents and workers	Negative	Possible	Minor	Medium

6.7.3.4 Culture

During community consultation, Project details were shared with local community groups to seek feedback on impacts to culture, but no responses were received. As the Project would not involve any construction and disturbance to land, and the site is within an existing industrial area, no significance rating for the impact of the Project on culture during operation has been assessed.

6.7.3.5 Health and Wellbeing

Consultation indicated that clean natural environments and access to open spaces is important to the local community, with health and wellbeing being a strong value for the community. While concerns were raised regarding perceived air quality and dust impacts from the Project, particularly from increased vehicle movements and extended operating hours, the Air Quality and Greenhouse Gas Assessment (Northstar, 2024) found that the Project would not result in any exceedances of the air quality criteria.

The Project's potential impact on health and wellbeing during operation is summarised in **Table 6-30**.

Table 6-30: Summary of Impacts to Health and Wellbeing

Impact	Nature of Impact	Likelihood	Magnitude	Significance Rating
Impacts to health and wellbeing due to operational noise and air quality emissions.	Negative	Possible	Minor	Medium

6.7.3.6 Surroundings

It is understood that the Strathfield LGA has a strong connection to open spaces and the preservation of canopy cover is viewed as integral to promoting Strathfield's healthy and active communities (refer to Section 5.2). The Project represents an intensification of operations utilising existing buildings, infrastructure, and site layout arrangement. Other than the additional material throughput The Project has the potential to impact on features

of the surrounding environment that are valued by the community including the natural environment, social infrastructure and amenity. The Project would not involve any removal of trees or canopy cover which is viewed as integral to promoting Strathfield's health and active communities.

Operation of the Project would not result in direct impacts to social infrastructure facilities; however, some users of social infrastructure facilities may experience indirect impacts due to minor changes in amenity (whether they are perceived or tangible). Community consultation emphasises the importance of recreational facilities such as Cooke Park.

Community concerns regarding foul odour and potential vermin were raised, particularly in relation to the temporary storage of non-recyclable waste. However, the Project will not increase the amount of residual waste stored outside, and waste storage will continue to be cleared daily. The Air Quality and Greenhouse Gas Assessment (Northstar, 2024), found that predicted concentrations of odour from the proposed Project are minor.

The Project's potential impact on surroundings are summarised in **Table 6-31**.

Table 6-31: Summary of Impacts to Surroundings

Impact	Nature of Impact	Likelihood	Magnitude	Significance Rating
Impacts to the natural environment due to removal of trees or other vegetation	Negative	Very unlikely	Minimal	Low
Impacts to social infrastructure due to changes in amenity	Negative	Unlikely	Minor	Low
Impacts to amenity due to a reduction in air quality for nearby residents	Negative	Possible	Minor	Medium
Increased pests, bugs and vermin attracted to the site as a result of the Project	Negative	Unlikely	Minor	Low
Increase in foul odours from the facility as a result of the Project.	Negative	Possible	Minor	Medium

6.7.3.7 Livelihoods

Operation of the Project would require up to six additional full-time jobs within the Strathfield South MRF, resulting in a potential positive social impact.

The Project's potential impact on livelihoods is summarised in **Table 6-32**.

Table 6-32: Summary of Impacts on Livelihoods

Impact	Nature of Impact	Likelihood	Magnitude	Significance Rating
Increased employment opportunities	Positive	Almost certain	Minor	Low

6.7.3.8 Conclusion

While minor impacts are anticipated, the Project is expected to contribute positively to both the local community and broader sustainability goals. With appropriate mitigation measures in place, the negative effects on traffic, air quality, and noise are considered low and manageable, ensuring the Project's overall benefit to the region.

Operation of the Project is expected to have long-term positive impacts on way of life by contributing to long-term sustainability initiatives and reducing waste diverted to landfill, which is aligned with a number of State and local government policies. The Project will also generate up to six additional full-time jobs at the MRF, resulting in a positive social impact.

6.7.4 Mitigation Measures

Socio-economic impacts will be managed in accordance with the recommended management and mitigation measures outlined in the respective specialist technical assessments for the Project. These include (but are not limited to) the:

- Air Quality Impact Assessment;
- Noise and Vibration Impact Assessment
- Traffic Impact Assessment; and
- Fire and Hazards Assessment

Additional management and mitigation measures to address potential social impacts as a result of the Project will include:

- community and stakeholder engagement during the environmental assessment and operational phases of the Project;
- environmental management procedures in accordance with updated Operations Environmental Management Plan;

6.8 Other Assessment Matters

6.8.1 Biodiversity

A BDAR waiver was provided by DPHI in January 2024 – Refer to **Appendix J**. The waiver noted that the Biodiversity, Conservation and Science Group (now Conservation Programmes and Heritage, Regulation) is satisfied the Project is not likely to have any significant impact on biodiversity values and a BDAR was not required to be submitted with the application. However, an assessment of potential biodiversity impacts is required.

The existing site is fully built out through a combination of hardstand, buildings and related infrastructure and is secured with fencing.

Industrial land use is adjoining the site to the north, south and west. East of the site the adjoining land is vacant. Two hydrolines are located within the vicinity, Cooks River which flows in a concrete channel approximately 65m to the north of the site and Coxs Creek which flows in a concrete channel approximately 50m to the south of the site.

A site survey undertaken by AEP ecologists concluded:

- No native vegetation exists on site;
- The only vegetation identified on site is limited to a very small patch dominated by weed species within the warehouse area near the fence line and a narrow strip of landscaping/screening vegetation along the Madeline Street frontage. These areas will not be impacted by the Project;

- The site contains no native vegetation communities, plus no hollow bearing trees and no sticks nests. As such arboreal mammals and or threatened bird species / including nocturnal birds are unlikely to utilise the site;
- As there are no caves, karsts or crevices within 2km of the site, and the landscape is highly urbanised with very little remnant vegetation, it is highly unlikely for threatened bat species to utilise the site. In addition to this, there are no suitable waterbodies for Southern Myotis to utilise within the site or within 200m of the site. Assessment of Coxs Creek and Cooks River indicate they are concrete drains and would not provide suitable habitat for Southern Myotis;
- There are no dams or other waterbodies around the site and therefore it is unlikely for frog species to be utilising the site. Existing site usage would also not be conducive to frog habitation, considering the entire site except for a small section of greening vegetation, is hardstand. While records of Green and Golden Bell Frog exist in Coxs Creek reserve, there is no viable entry portal to the site. The site is entirely fenced off and surrounded by industrial developments. All stormwater is channelled into grated pits which do not facilitate access by Green and Golden Bell Frog. As such, no impacts to this species are anticipated through the operation of the site;
- A previous development application for the redevelopment of the site, involving significant construction works, include a Seven Part Test of Significance for Green and Golden Bell Frog due to the site's proximity to populations recorded at Coxs Creek's Native Reserve, Freight Corp Pond in the Enfield Marshalling Yards, at Cook Park and in houses at Greenacre and South Strathfield;
- The assessment concluded that subject to implementation of appropriate frog protection measures during the use of the site, the proposed development (DA2015/177) would not have a significant impact on the species. Protection measures were identified for refurbishment works (during development), and during operation of the site which have been implemented as identified in the application for the BDAR waiver. Specifically, the assessment noted the frog-exclusion barrier already in place will ensure that Bell Frogs cannot enter active work sites and cannot be accidentally harmed or killed during the works. The proposed works will not prevent Bell Frogs from dispersing along the Cooks River canal; there will be no significant impact on the frogs or their life cycle. Amelioration measures proposed during the occupation and use of the site will ensure that no adverse impacts arise as a result of activities;
- A NSW BioNet Atlas search did not identify any threatened species records within the Subject Site. No evidence of Threatened Species use was identified during the site survey.
- The site is not part of any habitat connection and is highly unlikely to act as such for any threatened species;
- Natural hydrological processes will not be affected by the Project any further than the existing artificial regime.

Given the absence of biodiversity values recorded or observed on the site and limitation of the scope of the Project to intensification of operations within existing infrastructure (i.e. no construction), the Project has very low potential to impact on biodiversity values.

6.8.2 Landscaping

The street frontage is lined with well-developed trees softening the presentation of the site to Madeline Street. The entire site is existing hardstand area and buildings with no available space for additional landscaping.

6.8.3 Infrastructure Requirements

No new water, wastewater, power or other utility infrastructure is required to service the needs of the site with the Project. The site is serviced by a 11kv distribution line that runs along Madeline Street and a dedicated sub-station on site.

The addition of 6 staff (3 per shift) will place a minor increase in demand on water and wastewater infrastructure that can be met within the existing site services capacity.

6.8.4 Soils and Water

As the site is fully built out with hardstand and buildings and there is no construction or changes to the approved site layout, there will no disturbance to soils and no change to surface water run-off.

As part of an earlier subdivision application for the site and surrounding area, new surface water infrastructure was installed. The site is located within an industrial catchment which incorporates a minor drainage and trunk drainage network which discharges to the Cooks River.

The Cooks River flows in a concrete channel approximately 30m away from the eastern boundary of the site.

The application also provided for a total of 390m³ of onsite detention storage to be provided in the form of:

- 120m³ of storage within 20 above ground roof water detention tanks; and
- 270m³ of external surface storage, in 4 basins, up to a maximum depth of 250 mm;

Stormwater quality control is provided by way of proprietary gross pollutant catch baskets in gully pit inlets (Enviropods from Stormwater 360) and a proprietary cartridge filtration system located within an underground tank in the north west of the site.

6.9 Existing Site Environmental Management

The existing Site Environmental Management Plan (2024) is designed to identify all activities that may have an adverse impact on the environment or the potential to cause environmental harm and detail the mechanisms to prevent or minimize the impact of the Enfield MRF operations on the surrounding environment.

The Plan includes environmental objectives and targets for continued improvement and an Emergency Response Plan, an Environmental Monitoring Programme and an Emergency Response Plan to ensure the safety and well-being of all personnel, visitors, and the surrounding environment during emergency situations.

A Complaints Register Procedure is in place to ensure that environmental complaints are received, appropriately documented, and responded to quickly and efficiently; as well as to comply with the conditions of development consent where applicable.

Key environmental management programmes implemented on site include :

- Non-conforming waste procedure
- Traffic management
- Surface water quality management
- Litter management
- Dust management
- Fire prevention management

- Pest, vermin and weed management
- Fuel storage and refuelling management

6.10 Summary of Mitigation Measures

The following table provides a summary of the proposed measures to mitigate any potential environmental impacts of the Project and has been compiled from the mitigation measures detailed in **Chapter 6** of the EIS and the appended specialist technical studies.

Table 6-33: Mitigation Measures Table

Reference	Mitigation measure	Timing
Environmental management		
EM1	An updated Site Operations Environmental Management Plan will be prepared to minimise the risk of environment impacts and incidents from the Project.	Prior to commencement of expanded operations.
Air Quality and Odour		
AQ1	Keeping building doors closed, when possible, to reduce the egress of uncontrolled emissions.	During operation
AQ2	Ensuring the dust capture system and baghouses are operating effectively and are maintained to reduce emissions associated with the material recycling process.	During operation
AQ3	Storing baled product and glass cullet in enclosed areas.	During operation
AQ4	Limiting truck speeds on site to 5 km/hr	During operation
Noise and Vibration		
NV1	Noise mitigation measures approved under Modification 4 (February 2025) have been fully implemented on site.	Complete
Fire and Incident Management		
FI1	The site will have a security fence and will be staffed during business hours. CCTV monitoring will continue to be used to detect intruders at the site.	During operation
FI2	Where possible, storages at the site will alternate between combustible and non-combustible products to minimise the potential for incident propagation between storages.	During operation
FI3	Dry powder extinguishers will be available within 15m of any combustible waste storages.	During operation
FI4	Operators will continue to be trained in the use of site fire extinguishers.	During operation
FI5	A fire hydrant system will be provided in accordance with Clause E1D2 of the NCC and the relevant provisions of AS2419.1:2021.	During operation
FI6	A fire hose reel system will be provided in accordance with Clause E1D3 of the NCC and the relevant provisions of AS2441:2005.	During operation

Reference	Mitigation measure	Timing
FI7	Portable fire extinguishers will be provided in accordance with Clause E1D14 of the NCC and the relevant provisions of AS2444:2001.	During operation
FI8	A building occupant warning system will be provided in accordance with Clause E2D3 of the NCC and AS1670.1:2018.	During operation
FI9	Maintenance of stormwater filters to support their role in fire water treatment, including replacement of filters following a fire water incident.	During operation
FI10	An Emergency Response Plan (ERP) will be developed for the site in accordance with the <i>Hazardous Industry planning Advisory Paper No.2</i> .	During operation
FI11	An Emergency Service Information Package (ESIP) will be developed for the site in accordance with the FRNSW's Fire Safety Guideline <i>Emergency Services Information Package and Tactical Fire Plans</i> .	During operation
FI12	A designated 'smoking area' will continue to be provided at the site and shown on the site layout plan.	During operation
FI13	A hot work permit system will continue to be implemented to control any hot work undertaken at the site	During operation
FI14	The existing hydrant system will be reviewed by a Fire Protection Engineer to confirm the number of hydrants required to be provided at the site and to demonstrate the available pressure at the most disadvantaged hydrant complies with AS2419.1.	During operation
Greenhouse Gas & Energy Efficiency		
GH1	The most efficient vehicle and size will be used to minimise the number of trips required and minimise greenhouse gas (and particulate) emissions per tonne of material transported.	During operation
GH2	All vehicle/plant and machinery will be turned off when not in use and be regularly serviced to ensure efficient operation, including the optimisation of tyre pressures.	During operation
GH3	Truck routes and loading capacity will be designed to reduce the distance and effort required by the vehicles.	During operation
GH4	Maintenance of internal roads and entry points in good condition to avoid meandering of vehicles.	During operation
GH5	Where possible, B5 fuel will be used in plant and equipment.	During operation
GH6	Re.Cycle will endeavour, where possible, to use renewable energy sources, including solar power for power generation.	During operation
Traffic		
T1	Implement the following speed limits on site: 10km/h for vehicle traffic areas; - Walking pace in loading/unloading areas; - Walking pace in pedestrian designated areas; and 5km/h in vehicle parking areas.	During operation

Reference	Mitigation measure	Timing
T2	Continue to use approved truck routes and avoid residential areas as identified in the EIS and Traffic Impact Assessment	During operation
T3	Update the Site Traffic Management Plan to identify any new or amended measures required to effectively manage increased traffic movements through the site.	Prior to commencement of operations
Social		
SI1	Continued implementation of the consultation plan to promote feedback mechanisms, including: ▪ Enquiries and complaints handling process ▪ Updates to residents during operations to promote transparency.	

7 Project Justification

This section of the EIS provides an evaluation of the Project as a whole, having regard to the economic, environmental and social impacts of the Project and the principles of ecologically sustainable development.

7.1 Project and need

Re.Cycle is seeking approval to increase the co-mingled waste throughput at the existing MRF at 40-42 Madeline Street, Strathfield South by an additional 100,100 tpa, thereby increasing the total throughput of the facility for all materials from 99,900 tpa to 200,000 tpa. The increase in throughput responds to Government objectives to increase rates of recycling and resource recovery and to divert waste from landfill, including increasing the recycling of glass containers which is a growing waste stream following the successful roll out of the Container Deposit Scheme.

The increase in throughput relies on existing infrastructure, buildings and site layout, representing an efficient use of an existing site without the need for construction works or adjustments to the site layout.

7.2 Minimising impacts

The Site's location in close proximity to residential and recreational land uses requires consideration of ways to minimise potential amenity impacts such as noise. The Aussie Skips site located between the site and residential areas to the east has implemented noise control measures such as enclosure of work areas and extension of noise walls which provide a shielding effect for noise emissions from the Re.Cycle site to these areas. The Re.Cycle site has also implemented additional noise controls following approval of Modification 4 in February 2025.

The noise assessment concludes that noise emissions are significantly within assessment criteria when these measures are accounted for.

A cumulative air quality impact assessment of the Project with the neighbouring Aussie Skips site in response to Council and community concerns has been undertaken. This assessment concluded that potential impacts in relation to dust and odour are well within assessment criteria, with mitigation measures recommended to further reduce the risk of air emissions.

The Project would generate up to 71 additional truck movements per day which was assessed as having a negligible impact on the performance of nearby intersections in the AM peak period which would continue to operate at the highest level of services.

7.3 Responding to community feedback

The key assessment issues addressed in the EIS, including noise, air and traffic, align with feedback provided by community and other stakeholders during engagement activities. Specific feedback identified concerns about night time / early morning noise in the industrial area and general concern about truck traffic movements through the area.

Feedback from Council also raised concerns about noise and dust and requested the air quality assessment include a cumulative impact assessment with the neighbouring Aussie Skips site (as noted above).

7.4 Ecologically Sustainable Development

Ecologically sustainable development requires the effective integration of social, economic and environmental considerations in decision-making processes having regard to the principles in Table 7-1.

Table 7-1 ESD Principles

ESD Principles	Project response
The Precautionary Principle	The approach to assessment of impacts is conservative in nature, leading to an overestimation of impacts to safeguard against any uncertainty regarding actual impacts. Where risks of potential cumulative impacts have been identified, for example in relation to combined air quality impacts from the site and the neighbouring Aussie Skips site, a detailed quantitative air quality assessment has been undertaken to provide certainty regarding the combined impacts. The use of an existing facility with existing infrastructure, buildings and site layout capable of supporting the increased throughput, represents an efficient use of an existing site that avoids potential for significant impacts through disturbance of a new greenfield site.
Intergenerational equity	The Project contributes to the objectives of waste management policies and strategies to increase the rate of recycling and resource recovery, keep materials circulating in the economy as much as possible and preserve scarce landfill airspace by diverting materials away from landfill. The Project minimises the use of raw materials required to produce a range of materials such as glass bottles. By allowing materials to circulate in the economy for longer and by reducing the demand for raw materials that would otherwise have been required to produce new materials such as glass bottles, the Project is preserving resources for future generations while reducing long term environmental impacts associated with disposal and preserving the health of the environment for future generations.
Conservation of biological diversity and ecological integrity	A preliminary biodiversity survey confirmed the site has very low potential for biodiversity values which supported an application to waive the requirement for a BDAR. The surrounding area is noted for Green and Golden Bell Frog populations. When the site and surrounding sites were subdivided, the potential impacts on GGBF was assessed. The assessment noted the frog-exclusion barrier already in place will ensure that Bell Frogs cannot enter active work sites and cannot be accidentally harmed or killed during the works and will continue to provide protection as the sites move into the operational phase. Surface water controls implemented on the site ensure water run-off is managed to Council standards. The Project will not impact on Green and Golden Bell Frog populations. The site incorporates measures that avoid impact on Green and Golden Bell Frog populations in the surrounding area helping to conserve biological diversity and ecological integrity.
Improved valuation, pricing and incentive mechanisms	The use of an existing site with suitable infrastructure to accommodate the additional throughput is the most cost-effective way of increasing material processing and contributing to Government objectives to increase the rate of diversion of waste from landfill. Development of a new site with new infrastructure would not only be more expensive but likely lead to increased impacts. Where impacts have been identified, mitigation measures have been recommended which will be implemented at the expense of the applicant. These measures have been developed in cost-effective way by taking into account new noise mitigation measures on the neighbouring Aussie Skips site which shield noise emissions from the Project site to residential areas to the east.

7.5 Evaluation of the project as whole

The potential environmental impacts of the Project should be weighed against its public benefits when assessing and determining the application.

The EIS has described how the Project contributes to recycling and resource recovery, retaining materials in the economy for longer and preserving scarce landfill space. Current and future generations benefit from the reduced consumption of scarce resources and the preservation of the health of the environment in addition to the retention of existing employment and creation of new jobs. The use of an existing industrial site with the capability to process the additional throughput also supports these outcomes by avoiding the need to develop a new site.

The approach to the assessment of impacts in the EIS reflects key concerns identified by community and stakeholders in relation to amenity impacts such as noise, air and traffic. As these concerns relate to the industrial area generally, consideration of cumulative impacts is an important consideration in the EIS.

Detailed assessments have been undertaken, including cumulative assessment of air quality impacts with the Aussie Skips site, which demonstrate that potential impacts are within criteria. Specific mitigation measures have been identified which will be implemented by the applicant.

Considering the merits of the Project, the identification of community and stakeholder concerns and the ability to address these concerns through assessment and mitigation, implementation of the Project is considered to have merit and be in the public interest.

8 References

Department of Planning, Industry and Environment (DPIE), 2020, *Net Zero Plan Stage 1: 2020–2030*, New South Wales

Department of Planning, Industry and Environment (DPIE), 2021a *State Significant Development Guidelines – Preparing an Environmental Impact Statement*, State of New South Wales

NSW Department of Primary Industries and Environment, 2021b, *NSW Waste and Sustainable Materials Strategy 2041*

Department of Planning, Industry and Environment (DPIE), (2021c) *NSW waste and Sustainable Materials Strategy: A guide to infrastructure needs*

Greater Sydney Commission (GSC), 2018a, *The Greater Sydney Region Plan: A Metropolis of Three Cities*. State of New South Wales

Greater Sydney Commission (GSC) 2018b, *The Eastern City District Plan – connecting communities*. State of New South Wales

NSW Environment Protection Agency (EPA), 2009 *Interim Construction Noise Guideline*

NSW Environment Protection Agency (EPA), 2016, *Approved Methods for the Modelling and Assessment of Air Pollutants in NSW*

NSW Environment Protection Agency (EPA), 2017 *Noise Policy for Industry*

NSW Heritage, 2021, State Heritage Inventory, <https://www.hms.heritage.nsw.gov.au>, accessed 2022

Transport for NSW (TfNSW), 2020, *Future Transport 2056 Strategy*. State of New South Wales.

Appendix A: SEARs Table

Appendix B: Approved Site Plan

Appendix C:Engagement Outcomes Report

Appendix D: Air Quality Impact & Greenhouse Gas Assessment

Appendix E: Noise and Vibration Impact Assessment

Appendix F: Traffic Impact Assessment

Appendix G: Fire Incident Management Plan

Appendix H: Preliminary Risk Screening

Appendix I: Social Impact Assessment

Appendix J: BDAR Waiver Acceptance



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