

1st April 2022

Michael Cassel
Planning Secretary
Department of Planning, Industry and Environment
Locked Bag 5022
Parramatta NSW 2124

Attention: Shiraz Ahmed

Dear Mr Ahmed

RE: New Primary School in Mulgoa Rise, Glenmore Park (SSD 11070211): Construction Waste Management Sub-Plan in accordance with Condition B17.

I refer to the New Primary School in Mulgoa Rise, Glenmore Park approved on 18 March 2022.

In accordance with the requirements of Condition B17, attached to this letter we provide the Construction Waste Management Plan, to provide a procedural framework for the management of construction waste throughout delivery.

Should you wish to discuss the above further please do not hesitate to contact the undersigned.

Yours sincerely,



Justin Barrett
Senior Project Director
Schools Infrastructure NSW





*environmental management
pty ltd*

CONSTRUCTION WASTE MANAGEMENT PLAN (CWMP)

THE NEW PRIMARY SCHOOL IN MULGOA RISE



REVISION NUMBER:

VERSION 2

REPORT DATE:

10/03/2022

SUBMITTED TO:

JOE HANNA

RICHARD CROOKES

PRESENTED BY:

JO DRUMMOND

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THE NEW PRIMARY SCHOOL IN MULGOA RISE – CWMP

DISCLAIMER

This report is based on information provided by Richard Crookes Pty Ltd. To that extent this report relies on the accuracy of the information provided to the consultant. This report is not a substitute for legal advice on the relevant environmental related legislation, which applies to businesses, contractors or other bodies. Accordingly, EcCell Environmental will not be liable for any loss or damage that may arise out of this project.

DOCUMENT CONTROL

ISSUE NUMBER	DATE	COMMENT	AUTHOR	REVIEW
DRAFT 01	23/04/2021	Issue for comment	Simon Lunn	Jo Drummond
DRAFT 02	28/04/2021	2 nd Issue for comment	Simon Lunn	Jo Drummond
VERSION 1	06/05/2021	Revised project description, site location map, SEARs Table & Construction Waste Drawing	Simon Lunn	Jo Drummond
VERSION 1.1	27/07/2021	Revised project name & description	Simon Lunn	Jo Drummond
VERSION 1.2	15/08/2021	Revised cover photo, collection methodology and swept path drawing	Simon Lunn	Jo Drummond
Version2	10/03/2022	Updated comments from DET	Simon Lunn	Jo Drummond

INTRODUCTION

OVERVIEW

This Construction Waste Management Plan (CWMP) has been prepared by EcCell Environmental on behalf of the School Infrastructure NSW (the Applicant). It accompanies an Environmental Impact Statement (EIS) in support of State Significant Development Application (SSD-11070211) for The New Primary School In Mulgoa Rise (the site).

The purpose of this CWMP is to meet the key waste requirements issues of the Secretary's Environmental Assessment Requirements (SEARs) Section 4.12 (8) of the *Environmental Planning Assessment Act 1979* and will:

- a) Identify, quantity and classify waste streams to be generated during construction.
- b) Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.
- c) To ensure storage and collection of waste is designed and managed having appropriate regard to space, location, amenity and ongoing management of waste management facilities.
- d) Describe measures to be implemented to manage, reuse, and recycle and safely dispose of the waste.
- e) To maximise reuse and recycling of construction materials and materials from development.
- f) To encourage building design techniques in general which minimise waste generation.
- g) To minimise the amount of waste being deposited to landfill with targets to reuse or recycle at least 90% of construction and demolition waste as per the EFSG DG02 2.7.1 Construction and demolition waste requirements.
- h) Address relevant requirements of the Waste Classification Guidelines (EPA, 2014).

PROJECT DESCRIPTION

The proposed development involves the construction and operation of a new primary school at Glenmore Park (Mulgoa Rise). The development will initially accommodate 414 students, with the ability to be expanded to 1000 students when demand requires, which would be subject of a separate planning approval process.

Development approval will facilitate a Core 21 school with 18 learning spaces (LS), plus 2 support classes. The development will also include a school hall, library, staff facilities, and administrative areas built to Core 35, allowing capacity for future expansion. A large assembly area, games court, shared sensory play area and playground will also form part of the development.

The new school will provide the surrounding community access to the school's core facilities and will also provide Outside School Hours Care (OSHC) services to assist working families that commute and work extended hours.

The school is proposed to be open for students in January 2023.

The State Significant Development Application for the project seeks consent for the following key components.

- General learning areas.
- Multipurpose communal hall.
- Covered Outdoor Learning Areas (COLA).
- Administration area.

- Staff area including amenities.
- Student amenities.
- Library.
- Canteen.
- Storage.
- Assembly Area.
- Games Court.
- Shared sensory play area.
- Landscaping.
- Pedestrian circulation.
- Pedestrian access points.
- Internal open space.
- Staff car park with access off Forestwood Drive.
- Bike and scooter parking.
- Bus zone and drop off/pick spaces.
- Pedestrian crossings on Forestwood Drive, Darug Avenue, and Deerubbin Drive.
- Waste collection area.
- Connection of site services, including gas, potable water, sewer, power (including a new sub-station), and the NBN.

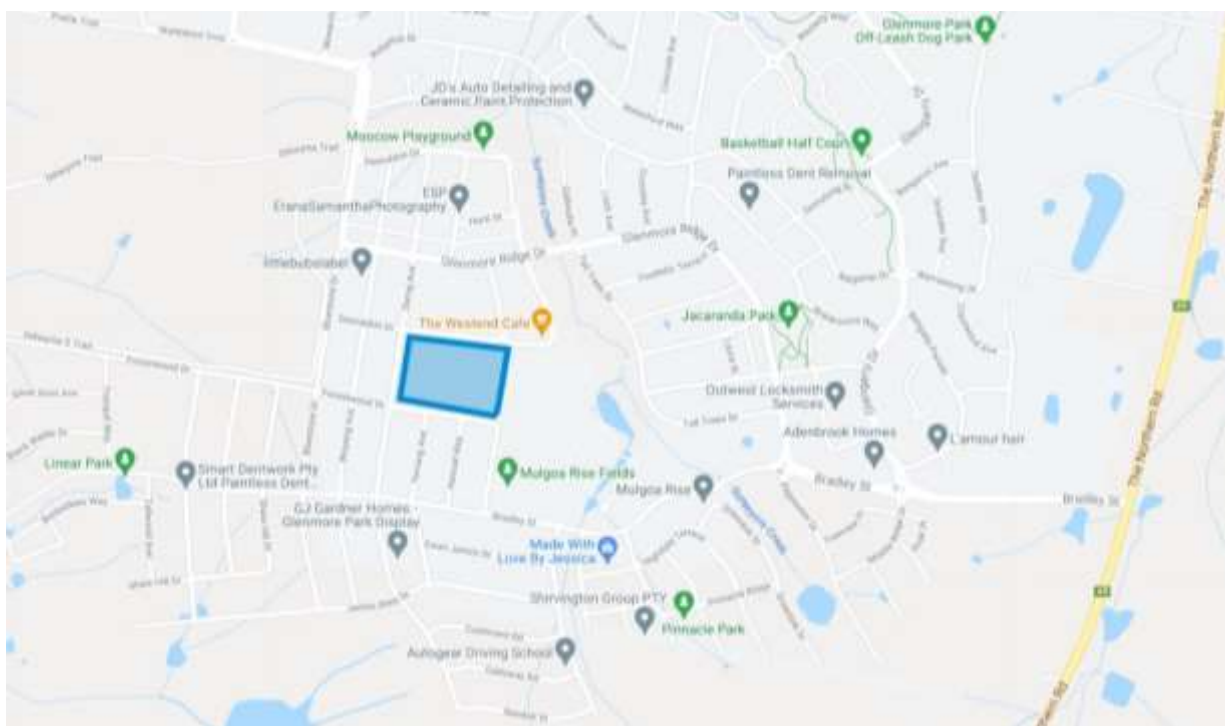


Figure 1 – Approximate Site Location (Source: Google Maps)

RESPONSE TO SEARS

The CWMP is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD. This table identifies the SEARs and relevant reference within this report.

Table 1 - SEARs Requirement & CWMP Page Reference

SEARs Item	Report Reference
Identify, quantify and classify the likely waste streams to be generated during construction and operation.	Page 7-8 PROJECT PHASE
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Page 8 PROJECT PHASE
Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Page 5 ON SITE WASTE MANAGEMENT REQUIREMENTS
Provide a hazardous materials survey of existing aboveground buildings that are proposed to be demolished or altered.	This is a brownfield site and no demolition or alteration of existing aboveground buildings will take place.

Table 2 – SSD Condition B 18

SSD Conditions B 18	Report Reference
B18 A The recording of quantities, classification (for materials Removed) and validation for materials to remain of each type of waste generated during construction and proposed use of material to remain	Page 9
B 18 B information regarding the recycling and disposal locations	Appendix B Bingo
B 18 c confirmation of the contamination status of the development areas of the site based on validation results	Supplementary Geotechnical Investigation Dated 29 th July 2021

NSW LEGISLATIVE REQUIREMENTS AND GUIDELINES

Relevant key legislation and guidelines applicable to the project include:

- Protection of the Environment Operations Act 1997
- Protection of the Environment (General) Operations Act 1998
- Waste Avoidance and Resource Recovery Act 2014
- Protection of the Environment Operations (Waste) Regulation 2014
- Waste Classification Guidelines (EPA, 2014)
- NSW Department of Planning and Environment, Secretary's Environmental Assessment Requirements (SEARs)

WASTE MANAGEMENT STRATEGIES

SERVICING ARRANGMENTS

The current legislation determines that the generator of waste is the owner of the waste until the waste crosses a calibrated weighbridge into a licensed facility. Waste contractors to demolition and construction contractors are the primary transporters of waste off-site, accordingly, waste contractors will be required to provide verifiable monthly reports on waste reused, reprocessed or recycled (diverted from landfill) or waste sent to landfill. These reports have a direct bearing on the generator's compliance with the relevant regulations.

The CWMP will be implemented on site throughout including singularly or collectively the demolition, construction and fit out phases.

A Waste Data File must be maintained on-site and all entries are to include:

- The classification of the waste
- The time and date of material removed
- A description of and the volume of waste collected
- The location and name of the waste facility that the waste is transferred to
- The vehicle registration and the name of the waste contractor's company

The Waste Data File will be made available for inspection to any authorized officer at any time during the life of the site works. At the conclusion of site works, the designated person will retain all waste documentation and make this validating documentation available for inspection.

Arrangement's will be made with the Waste Contractor to increase bin supply if there is an unexpected increase in waste generation.

CONSTRUCTION WASTE MANAGEMENT EQUIPMENT, BIN SIZES AND COLLECTION FREQUENCY

All waste will be removed by a licensed waste contractor using 15-meter bins on site. The construction waste will be removed when bins are full and within the construction site hours to reduce disturbance of the neighbours.

ROLES AND RESPONSIBILITIES

The waste management strategy for the project will operate over the design, procurement, and construction including fit out of the project and is detailed in Table .

Table 3 - Breakdown of Tasks and Responsibilities

Management Strategies	Responsibilities
<u>Design:</u> Use of modular components in design Use of prefabricated components in design Design for materials to standard sizes Design for operational waste minimisation Consider ways to avoid, reuse and recycle construction wastes	Architect & Engineer Architect & Builder Architect & Subcontractors Architect & Builder Subcontractors.
<u>Procurement:</u> Select recycled and reprocessed materials Select components that can be reused after deconstruction Prioritise suppliers that take back offcuts and unused product. Encourage contractors and subcontractors that use unneeded offcuts and unused product for use on other jobs Ordering the right quantities of materials (Purchasing Policy); Include prefabrication of materials	Architect, Engineer, Builder & Sub Contractors Architect, Engineer & Builder Sub-Contractors Sub-Contractors
<u>Pre-construction:</u> Waste management plan to be reviewed & approved prior to construction. Contract a Waste Contractor	Builder Waste Contractor
<u>Construction on-site:</u> Use the avoid, reuse, reduce, recycle principles Minimisation of recurring packaging materials Returning packaging to the supplier Separation of recycling of materials off site Audit and monitor the correct usage of bins Audit and monitor the Waste Contractor	Builder & Waste Contractor Sub-contractors Builder & Sub-contractor Waste Contractor Builder & Waste Contractor Builder
<u>Avoiding construction waste</u> Reduce extraneous packaging use reusable padding and careful packing. All packaging generated on site should be captured for reuse or recycling wherever possible. Reuse formwork; Use modular components Use reuse non-returnable containers on the job site to the maximum extent possible	Builder

ON SITE WASTE MANAGEMENT REQUIREMENTS

There will be a designated waste storage area for the disposal and storage of construction waste prior to collection. This area will be located conveniently for the construction work team to use the bins as well as for waste contractors to collect. An indicative location has been provided in Appendix A. Other requirements include:

- The routes for movement of waste between work site and waste storage area are to be kept obstruction-free.
- The routes for movement of bins and waste between storage and collection points are marked in the site drawing, and will be kept obstruction-free (if waste is moved between the waste storage area(s)).
- The waste bin collection point provided will be accessible for waste collection vehicles. There are no obstructions to turning or reversing, pulling up vehicles and lifting bins.
- Access for waste collection vehicles will not be compromised by construction-related activities vehicles or other consequences of construction staging.
- All waste not being reused on site will be removed during, or at the completion of, the construction stage.
- No waste will be left on site unless it is part of valid reuse on site, which is integral to and in place in the design.
- In order to manage noise levels, collection of waste from the construction site will only occur during hours approved for construction work.
- All vehicles entering or leaving the site must have their loads covered.
- All vehicles, before leaving the site, to be cleaned of dirt, sand and other materials, to avoid tracking these materials onto public roads.
- At the completion of the works, the work site is left clear of waste and debris.

WASTE MANAGEMENT PLAN APPLICATION

PROJECT:
The New Primary School In Mulgoa Rise
ADDRESS:
1-23 Forestwood Drive, Glenmore Park
OWNERS:
School Infrastructure NSW (SINSW)
DETAILS OF APPLICANT
Department of Education
DESCRIPTION OF BUILDINGS AND OTHER STRUCTURES CURRENTLY ON THE SITE:
This school is planned to be built on a brownfield site and will be a completely new build.
BRIEF DESCRIPTION OF PROPOSAL:
The proposed development will facilitate a Core 21 school with 18 learning spaces (LS) + 2 support classes, with the selected core facilities at Core 35, for the Hall, Library, Staff facilities and Admin. This will Cater for an initial 414 students. The future development, which is not considered at this time and does not form part of the current SSDA, will complete the build to a Core 35, facilitating future expansion up to 44 learning spaces and 4 support classes.
IF MATERIALS / WASTE IS REUSED ON SITE OR OFF SITE, HOW WILL IT BE RE-USED:
There is minimal excavation of Excavated Natural Material (ENM), which will be used back on the site for landscaping. This material will be covered to reduce soil displacement and prevent air pollution.

	Name	Signed	Contact Number	Date
Prepared by:	Jo Drummond		0412214233	15/08/2021



PROJECT PHASE

EXCAVATION

Material Type on Site	Estimated Volume (m³) or Weight (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Excavated Natural Material (ENM) Brownfield site		Reused Volume TBA	Nil	Used for site levelling / cut & fill of the site.	N/A	N/A
Sub Total						
TOTAL						
Narrative: There is minimal excavation of ENM, which will be used back on the site for landscaping. This material will be covered to reduce soil displacement and prevent air pollution.						
A validation assessment E33177Prpt6-VAL and Site Audit Report 21115/21049 SAR189 have been completed						

CONSTRUCTION

Material Type on Site	Estimated Volume (m³) or Weight (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Concrete Brick Block- work & Tile		157m³		Co-mingled Bins	Bingo	Crushed for road base
Metals		82m³		Co-mingled Bins	Bingo	Scrap Metal Dealer for smelting
Timber off-cuts		170m³		Co-mingled Bins	Bingo	Recycled for chips and mulch
Cardboard		137m³		Co-mingled Bins	Bingo	Recycled into cardboard
Plasterboard		160m³		Co-mingled Bins	Bingo	Recycled as soil conditioner
Plastics, plastic packaging, paint drums*, containers		62m³	24m³	Co-mingled Bins	Bingo	- Styrene and plastic to landfill * Paint drums nested and recycled
Pallets and Reels	60 units			Separated onsite	Bingo	Returned to the supplier
Liquid Waste			16m³	Separated onsite	Bingo	Transferred to licenced landfill
General Waste			143m³	Co-mingled Bins	Bingo	Transferred to licenced landfill
Sub Total	NB: 60 units	768m³	183m³			
TOTAL	951m³			NB: Plus, an additional 60 pallets (single units returned to suppliers for reuse)		
Narrative:						
As the contracts for all contractors have not been let there are still those including the waste contractor to be advised Bingo.						
All waste will be co-mingled and taken for off-site separation and reuse or recycling except pallets and reels.						

APPENDIX A DEMOLITION AND CONSTRUCTION WASTE PLAN DRAWING



APPENDIX B BINGO WASTE MANAGEMENT AND RECYCLING PLAN



1300 424 646
bingoindustries.com.au

CONFIDENTIAL

Waste Management & Recycling Plan (NSW)

Client: Richard Crookes Constructions
Project: 1-23 Forestwood Dr, Glenmore Park

BINGO Industries offers a complete, comprehensive solution to the management and recycling of wastes to assure compliance with clients' waste management policy.

BINGO Recycling Centre's combine bin storage, waste collection, waste recycling and waste transfer to service the building and construction industry and domestic waste management needs in New South Wales. Wastes collected by BINGO Industries are taken directly to one of these facilities where approximately 90% of wastes are converted to recovered resources.

BINGO Recycling Centre Alexandria EPL No. 4679
BINGO Recycling Centre Artarmon EPL No. 20763
BINGO Recycling Centre Auburn EPL No. 10935
BINGO Recycling Ecology Park Eastern Creek EPL No. 20121
BINGO Recycling Centre Greenacre EPL No. 20847
BINGO Recycling Centre Kembla Grange EPL No. 20601
BINGO Recycling Centre Mortdale EPL No. 20622
BINGO Recycling Centre Patons Lane EPL No. 21259
BINGO Recycling Centre Revesby EPL No. 20607
BINGO Recycling Centre Tomago EPL No. 20585

landfill. Waste materials inwards are processed to achieve the maximum recovery of resources and the minimum of un-recoverable material for disposal.

Typical Composition of BINGO's Wastes Inwards

Wastes Inwards	Percentage (approx.)
Heavy Recyclable Materials	45%
Light Recyclable Materials	35%
Metals	10%
Non-Recyclable Materials	10%
Total	100%

Heavy Recyclable Materials:

- Soil
- Dirt
- Sand
- Rubble
- Brick
- Concrete
- Tiles
- Stone
- Asphalt

Light Recyclable Materials:

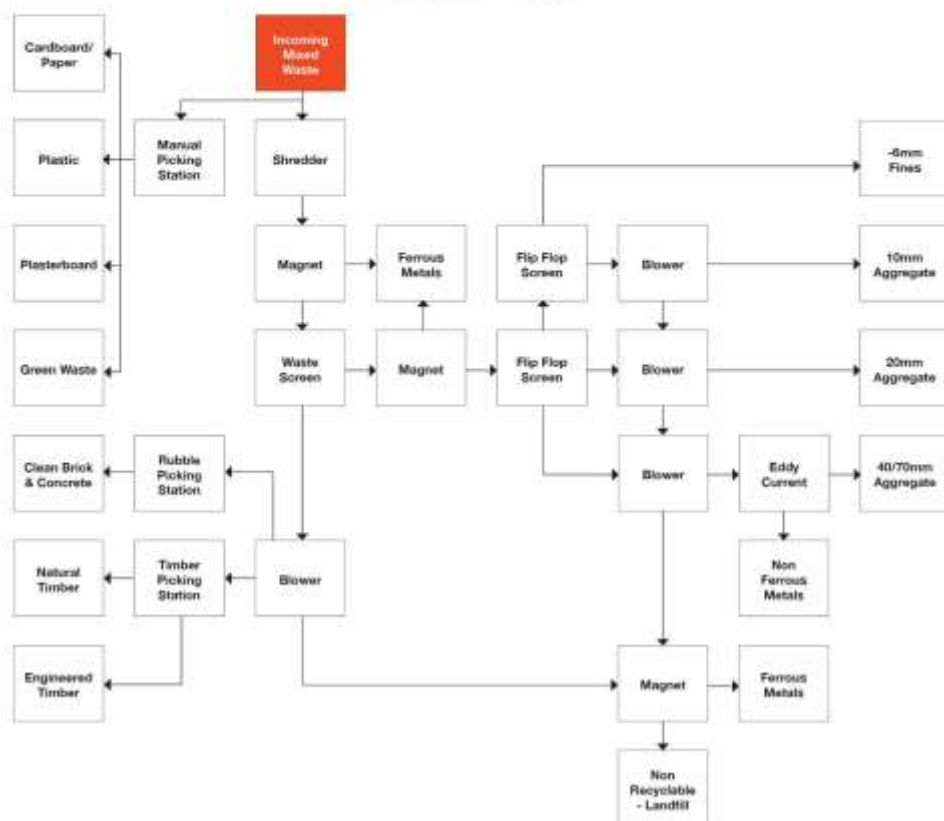
- Timber
- Green Waste
- Cardboard/ Paper
- Plastic
- Plasterboard

Metals:

- Ferrous (steel, black iron)
- Non-Ferrous (copper, wire, aluminium, stainless)

At the Resource Recovery Facility an effective waste processing procedure is applied. See Materials Flow Diagram (below). Wastes inwards unloaded onto the sorting area where the waste is raked with a hydraulic excavator to expose the contents and where recyclable materials are hand and machine sorted.

**BINGO Recycling Centre
Materials Flow Diagram**



In summary, BINGO Industries take all their mixed waste skip bins directly to EPA Licensed Recycling Centres. From there the waste is sorted and separated into the following material classes for processing and recycling.

Type of Material	Where Processed/ Recycled	How Processed/ Recycled
Heavy Recyclable Materials (soil, dirt, sand, rubble, concrete, brick, tiles, asphalt, stone)	BINGO Recycling Centres	Re-processed into recycled products (such as aggregates and roadbase) by crushing and screening.
Timber / Green Waste	- Clean & Green Organics - BINGO Recycling Ecology Park	Re-processed into woodchip and mulch by shredding.
Metal / Steel	- Sell & Parker - CMI - SIMS - Sydney Copper Scraps	Re-processed into new metal and steel products by shearing, baling and re-smelting.
Brick / Concrete	BINGO Recycling Ecology Park	Re-processed into recycled products (such as aggregates and roadbase) by crushing and screening.
Cardboard / Paper / Plastic	- Polytrade Recycling - J.J. Richards - Orora	Re-processed into new cardboard, paper and plastic products by breaking down the material into a form for re-use.
Plasterboard	ReGyp	Re-processed into gypsum products by shredding and screening.
General Waste	Eastern Creek Landfill	n/a

- **BINGO Recycling Centres**
76-82 Burrows Road, Alexandria NSW 2015
10 McLachlan Ave, Artarmon NSW 2064
3-5 Duck Street, Auburn NSW 2144
Honeycomb Drive, Eastern Creek NSW 2766
35 Wentworth St, Greenacre NSW 2190
50 Wyllie Road, Kembla Grange NSW 2526
20 Hearne Street, Mortdale NSW 2223
Patons Lane, Orchard Hills NSW 2748
37-51 Violet Street, Revesby NSW 2212
29 Laverick Avenue, Tomago NSW 2322
- **Clean & Green Organics**
769 The Northern Rd, Bringelly NSW 2566
- **Sell & Parker**
45 Tattersall Road, Blacktown NSW 2148
- **CMI**
38 York Road, Ingleburn NSW 2565
- **SIMS**
43 Ashford Ave, Milperra NSW 2214
76 Christie St, St Marys NSW 2760
- **Sydney Copper Scraps**
130 Adderley St, Auburn NSW 2760
- **Polytrade Recycling**
32 South St, Rydalmere NSW 2116
40 Madeline St, South Strathfield NSW 2136
- **J.J. Richards**
12 Heald Rd, Ingleburn NSW 1890
8 Kommer Pl, St Marys NSW 2760
- **Orora**
1891 Botany Rd, Matraville NSW 2036
- **ReGyp**
330 Captain Cook Drive, Kurnell NSW 2231
- **Eastern Creek Landfill**
Honeycomb Drive, Eastern Creek NSW 2766