GALUNGARA PUBLIC SCHOOL
STAGE 2 CONSTRUCTION
WASTE MANAGEMENT PLAN

VERSION NUMBER:

VERSION 6

REPORT DATE:

10/02/2022

SUBMITTED TO:

RICHARD CROOKES
CONSTRUCTIONS

PRESENTED BY:

JO DRUMMOND

ECCELL ENVIRONMENTAL MANAGEMENT PTYLTD
35 WAVERLY CRST, BONDI JUNCTION NSW 2022

TABLE OF CONTENTS

Galungara Public School (SSD 9368): Submission of Construction Waste Management Sub-Plan in accordance with Condition B18 & B13

Condition	Condition requirements	Document reference
B18	The Construction Waste Management Sub-Plan (CWMSP) must address, but not be limited to, the following: (a) detail the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations;	Appendix H, CEMP rev 2 03/06/20: SSD 9368 – B18 – Construction Waste Management Sub-Plan Phase 2: Construction, p10
	(b) removal of hazardous materials, particularly the method of containment and control of emission of fibres to the air, and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.	Phase 1: Excavation, p7
B13	(a) detailed baseline data;	Not applicable
	(b) details of: (i) the relevant statutory requirements (including any relevant approval, license or lease conditions);	Section 3, Legislative Requirements and Guidelines, p5
	(ii) any relevant limits or performance measures and criteria; and	Section 2, Objectives and Targets, p5
	(iii) the specific performance indicators that are proposed to be used to judge the performance of, or guide the implementation of, the development or any management measures;	Section 4, Servicing Arrangements, p5
	(c) a description of the measures to be implemented to comply with the relevant statutory requirements, limits, or performance measures and criteria;	Section 4, Servicing Arrangements, p5

	(d) a program to monitor and report on the: (i) impacts and environmental performance of the development;	Section 6, Monitoring and Reporting, p7
	(ii) effectiveness of the management measures set out pursuant to paragraph (c) above;	Section 6, Monitoring and Reporting, p7
	(e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible;	Appendix B: Contingency Plan, p12
	(f) a program to investigate and implement ways to improve the environmental performance of the development over time;	Not applicable
	(g) a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria);	Section 7, Corrective Action, p7
	(ii) complaint;	Section 8, Complaints Handling, p7
	(iii) failure to comply with statutory requirements; and	Section 7, Corrective Action, p7
	(h) a protocol for periodic review of the plan.	Section 9, Construction Waste Management Planning Review, p7

1. INTRODUCTION

Overview

This Construction Waste Management Plan (CWMP) has been prepared by EcCell Environmental on behalf of Richard Crookes Constructions for the new Alex Avenue Public School at the corner of Farmland Drive and future realignment of Pelican Road in Schofields (the site). The site is legally described as proposed Lots 1 and 2, being part of existing Lot 4 in DP1208329 and Lot 121 in DP1203646.

The new school will cater for approximately 1,200 primary school students and 70 full-time staff upon completion. The plan is for:

- Construction of two 2-storey classroom buildings (Block B) containing 20 homebases comprising:
  - Collaborative learning spaces;
  - Learning studios;
  - Covered outdoor learning spaces;
  - Practical activity areas; and
  - Amenities.
- Associated site landscaping and open space including associated fences throughout and games courts;
- Pedestrian access points along both Farmland Drive and the future Pelican Road;
- Substation on the north-east corner of the site; and
- School signage to the front entrance.

All proposed school buildings will be connected by a covered walkway providing integrated covered outdoor learning areas (COLAs). School staff will use the Council car park for the adjacent sports fields pursuant to a Joint Use agreement. The proposed School pick up and drop off zone will also be contained within the future shared car park and will be accessed via Farmland Drive.

Purpose

The purpose of this CWMP is to meet the requirements of the State Significant Development Application (SSDA) conditions of consent, particularly Condition B17 and will:

a) Identify, quantity and classify waste streams to be generated during construction.
b) Describe measures to be implemented to manage, reuse, and recycle and safely dispose of the waste.
c) Identify servicing arrangements including but not limited to waste management loading zones.
d) Prepare a site drawing for Construction Waste Management Loading Zones.

Condition of Approval (CoA) B12and B17

CoA Reference	CoA Detail
B13	(d) a program to monitor and report on the: (i) impacts and environmental performance of the development; (ii) effectiveness of the management measures (e) a contingency plan to manage any unpredicted impacts and their consequences and to ensure that ongoing impacts reduce to levels below relevant impact assessment criteria as quickly as possible; (g) a protocol for managing and reporting any: (i) incident and any non-compliance (specifically including any exceedance of the impact assessment criteria and performance criteria); (ii) complaint; (iii) failure to comply with statutory requirements; and (h) a protocol for periodic review of the plan.
B18	**Construction Waste Management Plan** (a) detail the quantities of each waste type generated during construction and the proposed reuse, recycling and disposal locations; (b) removal of hazardous materials, particularly the method of containment and control of emission of fibers to the air, and disposal at an approved waste disposal facility in accordance with the requirements of the relevant legislation, codes, standards and guidelines, prior to the commencement of any building works.

2. OBJECTIVES & TARGETS

The project construction waste objectives include:

- Meeting all waste management standards while ensuring the health and safety of the workers on the project.
- Maximising the quantities of materials diverted from landfill by reusing, recycling and reprocessing off-site.
- Disposal of no more than 20% of residual waste materials to a licensed landfill in accordance with both regulatory and legal requirements.
- The diversion from landfill of 80% of construction waste by weight, to meet the criteria of the NSW State Government's waste legislation, waste policy settings and regulatory regime.

3. 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 2001
- Protection of the Environment Operations (Waste) Regulation 2014
- NSW Department of Planning and Environment, Secretary's Environmental Assessment Requirements (SEARs).
- SSDA Conditions of Consent

4. SERVICING ARRANGMENTS

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

The CWMP will be implemented on site throughout excavation and construction. A waste data file will be maintained on site.

All entries in the Waste Data File will include:

- Classification of the waste;
- Time and Date of material removed
- Description and size of waste
- Waste facility used
- Vehicle registration and Waste Contractors Company name

The Waste Data File will be available for inspection to any authorized Council Officer at any time during 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.

5. WASTE MANAGEMENT STRATEGIES

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

Management Strategies	Responsibilities
Design:	
Use of modular components in design	Architect & Engineer
Use of prefabricated components in design	Architect, Builder, Subcontractors.
Design for materials to standard sizes	Architect, Subcontractors
Design for operational waste minimisation	Architect & Builder
Procurement:	
Select recycled and reprocesses materials	Architect, Engineer, Builder & Sub Contractors
Components that can be reused after deconstruction	Architect, Engineer & Builder
Pre-construction	
Waste management plan to be reviewed & approved prior to construction	Builder
Construction on-site:	
Use the avoid, reuse, reduce, recycle principles	Builder & Waste Contractor
Minimisation of recurring packaging materials	Sub-contractors
Returning packaging to the supplier	Builder & Sub-contractor
Separation of recycling of materials off site	Waste Contractor
Audit & monitor the correct usage of bins	Builder & Waste Contractor
Audit and monitor the Waste Contractor	Builder

6. MONITORING & REPORTING

Regular observations will be made by the Construction Site Manager and measures put into place to monitor the waste bins on site. The Site Manager will review any

- Incident, non-conformance and corrective action required;
- Monthly waste management reporting; including ensuring all waste quantities generated are recorded, including tracking of receipts for waste, recycling or disposal via the appointed waste contractor;
- Record waste classification and testing results;
- Update the CWMP in light of any changes to construction activities or further information, which may alter waste management practices;
- Auditing of waste management generation and practices across the site as a component of broader environmental site audits;
- Visual inspections daily to ensure waste management controls are implemented and maintained across site;
- Final review of the CWMP upon project completion to ensure information accurately reflects site activities, and to assist future waste management planning; and
- Ensure compliance with Approval, Permit and License sections that are relevant to current operations

7. CORRECTIVE ACTION

Where formal auditing, daily visual inspections or incident reporting identify incorrect storage or disposal procedures, or maintenance or waste management issues, observations will be promptly reported to the Construction Site Manager and recorded. The Construction Site Manager will determine appropriate measures to rectify the issues in a timely manner in consultation with the Environmental Management Representative and Health and Safety Manager where required.

8. COMPLAINTS HANDELING

Members of the general public impacted by the construction phase are able to enquire and complain about environmental impacts via the following channels:

- Information booths and information sessions held at the school or local community meeting place, advertised at least 7 days before in local newspapers, on our website and via letterbox drops;
- 1300 number that is published on all communications material, including project site signage;
- School Infrastructure NSW email address that is published on all communications material, including project site signage.

9. CONSTRUCTION WASTE MANAGEMENT PLANNING REVIEW

Richard Crooks have in place an external environmental auditing programme this will include a prestart and an annual review of site waste documentation including:

- Compliance with Approval, Permit and Licence sections that are relevant to current operations
- Compliance with the CWMP
- Compliance with waste disposal records

10.WASTE MANAGEMENT PLAN APPLICATION

PROJECT:
Alex Avenue Public School
ADDRESS:
CNR Farmland Drive and future realignment of Pelican Road in Schofields
Details of Application:
RICHARD CROOKES CONSTRUCTIONS
Description of buildings and other structures currently on the site:
No buildings and other structures on the site and no demolition is required.
Brief description of proposal:
Construction of: • A 2-storey library, administration and staff building (Block A); • Four 2-storey classroom buildings (Block B) containing 40 homebases; • A single storey assembly hall (Block C) with a performance stage and integrated covered outdoor learning area (COLA). The assembly hall will have OOSH facilities, storeroom areas and amenities; • Associated site landscaping and open space including associated fences throughout and games courts.
If materials / waste is reused on site or off site, how will it be re-used:
Reuse of soil and excavation material on site, reuse of drums, pallets and rio materials.

	Name	Signed	Contact Number	Date
Prepared by :	Jo Drummond	Jo Drummond	0412214233	20/11/2019

PHASE: DEMOLITION

There is no demolition as this is a greenfield site.

PHASE 1: EXCAVATION

Material Type on Site	Estimated Volume (m^3) 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 VENM Greenfield site			1,000 m^3	NA	Grasshopper Environmental	Transferred to licenced receiving facility
Sub Total	**1,000 m^3**					
TOTAL	**1,000 m^3 taken off site**					

Narrative: There is minimal excavation of virgin excavated natural material (VENM). Material, which will be used back on the site for landscaping. This material will be covered to reduce soil displacement and prevent air pollution.

The Detailed Site Investigation (Greencap report reference C122140:J160656_Detailed Site Investigation Proposed Alex Avenue Public School) did not identify any unacceptable human health or ecological risk associated with the surface soil quality. The investigation tested for potential pollutants common to this type of site including Hydrocarbons, Heavy Metals, Pesticides and Asbestos fibres. No results were reported above the adopted assessment criteria in any of the tested samples. Given this, it is unlikely that contaminated soils or asbestos material with the potential to become airborne would be encountered during the excavation and construction phase of the development.

This excludes general considerations that are relevant to unexpected finds.

PHASE 2: CONSTRUCTION

Material Type on Site	Estimated Volume (m^3) or Weight (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal Location / Contractor	Waste Depot, Recycling Outlet or Landfill site
Concrete Brick Block-work & Tile		82m^3		Co-mingled Bins	Grasshopper Environmental Pty Ltd	Crushed for road base
Metals		54m^3		Co-mingled Bins		Scrap Metal Dealer for smelting
Timber off-cuts		96m^3		Co-mingled Bins		Recycled for chips and mulch
Cardboard		60m^3		Co-mingled Bins		Recycled into cardboard
Plasterboard		85m^3		Co-mingled Bins		Recycled as soil conditioner
Plastics, plastic packaging, paint drums*, containers		60m^3	8 m^{3-}	Co-mingled Bins		- Styrene and plastic to landfill * Paint drums nested and recycled
Pallets and Reels	63 units			Separated onsite		Returned to the supplier
Liquid Waste			9 m^3	Separated onsite		Transferred to licenced landfill
General Waste			95 m^3	Co-mingled Bins		Transferred to licenced landfill
Sub Total	**NB:63 units**	**437**	**112 m^3**			
TOTAL	**549**			**NB: Plus, an additional 63 pallets (single units returned to suppliers for reuse)**		

Narrative:
All waste will be co-mingled and taken for off-site separation and reuse or recycling except Pallets and Reels.
It is not anticipated that any hazardous wastes will be generated during construction however during any disposal and material recovery activities, one should beware of potentially hazardous materials such as fluorescent tubes, laboratory chemicals, batteries, asbestos, pesticides and herbicides. If these types of wastes are identified, ensure that the waste is transported to a place that can lawfully accept it under Section 143 of the Protection of the Environment Operations Act 1997.

APPENDIX A – WASTE MANAGEMENT LOADING ZONE

APPENDIX B – CONTINGENCY PLAN

No	Activity	Aspect Impact	Inherent Risk	Actions / Control Measure	Residual risk Score	Action By	Contingency Plan
Waste Management							
1.1	All waste would be assessed, classified, managed and disposed of legally	Soil Contamination	13	All waste will be assessed, classified, managed and disposed of in accordance with the Waste Classification Guidelines (DECC, 2008).	6	Environmental Manager	No waste to leave the site without a waste classification.
.2	All waste materials removed from the site will only be directed to a waste management facility lawfully permitted to accept the materials	Illegal dumping of waste	13	Waste Tracking System Provide monthly waste reports with tipping dockets indicating that waste has been taken to a licensed waste facility.	6	Waste Contractor	Withhold payment unless dockets provided and correlated.
1.3	Waste tracking reporting and auditing of waste volumes and disposal destinations	Illegal dumping of material	13	Waste Tracking System	6	Waste Contractor	Audit waste contractor to ensure they comply with current legislation.
1.4	All waste materials removed from the site shall only be directed to a waste management facility or premises lawfully permitted to accept the materials	Illegal dumping of waste material. Waste taken to an unlicensed facility.	13	Waste Tracking System provided by Waste Contractor docketing documenting waste leaving the site and crossing a weighbridge to a licenses waste facility.	6	Waste Contractor	Withhold payment unless dockets provided. Waste contractor to advise Richard Crooks if waste has been taken to un unlicensed facility
1.5	All liquid waste generated on the site shall all be assessed and classified in accordance with Waste Classification Guidelines	Incorrect classification	13	Waste Tracking System documenting liquid waste leaving the site and crossing a weighbridge to a licenses liquid waste facility.	18	Waste Contractor	Request disposal dockets for all liquid waste leaving the site.