CONSTRUCTION WASTE MANAGEMENT PLAN

JOHN PALMER PUBLIC SCHOOL UPGRADE
85 THE PONDS BOULEVARD, THE PONDS

Revision Number: VERSION 1

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Presented by: JO DRUMMOND
EcCell Environmental Management
35 Waverley Crescent
Bondi Junction NSW 2022
www.eccellenvironmental.com.au

Submitted to: Jacobs
Marisa Sidoti

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DOCUMENT CONTROL				
ISSUE NUMBER	DATE	AUTHOR	REVIEW	APPROVED BY
DRAFT	2/08/2021	Jo Drummond	Jo Drummond	Patrick Nolan
Version 1	13/10/2021	Patrick Nolan	Jo Drummond	Jo Drummond

1 INTRODUCTION

This Construction Waste Management Plan (CWMP) prepared by EcCell Environmental Management (EcCell) accompanies an Environmental Impact Statement (EIS) pursuant to Part 4, of the *Environmental Planning and Assessment Act* 1979 (EP&A Act) in support of a State Significant Development Application (SSD - 23330227).

The development is for upgrading works comprising alterations and additions to John Palmer Public School at 85 The Ponds Boulevard, The Ponds. The site is legally described as Lot 1 DP 1131340.

The site is roughly rectangular in shape, with a total area of 29,830 m^2 and street frontages to Pebble Crescent to the west, Jetty Street to the south and The Ponds Boulevard to the east. The Ponds Shopping Centre adjoins the northern property boundary of the school.

This report addresses the relevant Secretary's Environmental Assessment Requirements (SEARs), specifically Item 17.

Table 1: SEARs Requirement & CWMP Report Reference

SEARs Item 17	Report Reference
Identify, quantify and classify the likely waste streams to be generated during construction and operation.	Construction and Demolition Waste Classification Waste Classification Guidelines (EPA, 2014) Section 8 Project Phase
Provide the measures to be implemented to manage, reuse, recycle and safely dispose of this waste.	Section 8 Project Phase
Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Section 6 Waste Management Strategies
Provide a hazardous materials survey of existing aboveground buildings that are proposed to be demolished or altered.	Section 6 Waste Management Strategies

1.1 THE PROPOSAL

The proposed development seeks to upgrade John Palmer Public School. The upgrade consists of the following alterations and additions:

- Construction of a new three-storey building facing The Ponds Boulevard, which will accommodate 29 Permanent Learning Spaces and 1 new staff room;
- Construction of a one-storey new library building;
- Relocation of service access to staff car park off The Ponds Boulevard, including alterations to the existing car park to accommodate service vehicle;
- One-storey extension to and refurbishment of existing School Hall building. The School Hall extension will accommodate ancillary spaces for Out of Hours School Care;
- Building Block D will be repurposed from an existing library to special program spaces and administration;
- Refurbishment of Building F to provide 1 new support unit;
- Minor additions and internal refurbishments to Building A;
- Removal of all 20 existing demountable classroom once alterations and additions have been completed; and
- Ancillary works to support the alterations and additions including landscaping and service provision.

2 PROJECT LOCATION

Figure 1: Site Context Map *(Source: MetroMap)*

3 OBJECTIVES OF THE CWMP

The objectives of the CWMP include:

a) Identify, quantify and classify waste streams to be generated during demolition, excavation and construction to address the Waste Classification Guidelines (EPA, 2014);

b) Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site;

c) To describe measures to be implemented to manage, reuse, and recycle and safely dispose of the waste;

d) To maximise reuse and recycling of construction materials and materials from the school;

e) To encourage building design techniques in general which minimise waste generation; and

f) 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.

4 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); and
- Blacktown Development Control Plan 2015.

5 WASTE CONTRACTOR REQUIREMENTS

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 and demolition contractors to 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, excavation and construction 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 licensed waste facility that the waste is transferred to; and
- The vehicle registration and the name of the waste contractor's company.

The Waste Data File will be made available for inspection to any authorised 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.

Arrangements will be made with the waste contractor once contracted, to increase bin supply if there is an unexpected increase in waste generation.

5.1 CONSTRUCTION WASTE MANAGEMENT EQUIPMENT, BIN SIZES AND COLLECTION FREQUENCY

All waste will be removed by a licensed waste contractor using appropriately sized construction bins in an area allocated by the builder. The construction waste will be removed when bins are full and within the construction site hours to reduce disturbance of the neighbours and disruption to the school.

6 WASTE MANAGEMENT STRATEGIES

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 1.

Table 2 - Breakdown of Tasks and Responsibilities

Management Strategies	Responsibilities
Design	
• Use of modular components in design • Use of prefabricated components in design • Design for materials to standard sizes • Design for operational waste minimisation	• Architect & Engineer • Architect, Builder & Subcontractors • Architect & Subcontractors • Architect & Builder
Procurement	
• Select recycled and reprocessed materials • Select components that can be reused after deconstruction	• Architect, Engineer, Builder & Subcontractors • Architect, Engineer & Builder
Pre-construction	
• Construction Waste Management Plan to be reviewed & approved prior to construction • Contract a Waste Contractor that takes waste to a licensed facility	• Builder • Waste Contractor

Management Strategies	Responsibilities
Construction on-site	
• 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 & monitor the correct usage of bins • Audit & monitor the Waste Contractor to ensure demolition and construction waste is recycled and taken to a licensed facility	• Builder & Waste Contractor • Subcontractors • Builder & Subcontractor • Waste Contractor • Builder & Waste Contractor • Builder

6.1 ON-SITE WASTE MANAGEMENT AND STORAGE REQUIREMENTS

There will be a designated waste storage area for the disposal and storage of demolition, excavation and construction waste prior to collection. This area will be located conveniently for the work team to use the bins as well as for waste contractors to collect. Other requirements include:

- Construction waste storage is contained wholly within the site once the Construction Compound is established
- 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; and
- At the completion of the works, the work site is left clear of waste and debris.

6.2 REUSE OF DEMOLITION, EXCAVATION AND CONSTRUCTION MATERIALS

Construction Materials and off-cuts can be reused on-site. An area within the materials lay-down area will be allocated for the storage of materials to be reused.

These items include

- Plastic buckets
- Timber crates
- Timber off cuts
- Paint brushers and rollers (Wrapped in plastic to maintain moisture)
- Plasterboard offcuts
- Cardboard boxes

Clean fill will be reused on-site after verification by soil testing and Waste Classification.

6.3 STAGING OF CONSTRUCTION WORKS

The John Palmer Public School will be constructed in multiple stages. This is subject to market procurement assessment, providing budget and environmental controls. The project will be staged as indicated in the Preliminary Construction Management Plan – refer to this document for more information. It is a requirement to ensure construction works and operations will be managed to ensure public safety and amenity on the surrounding site.

6.4 MANAGEMENT OF HAZARDOUS WASTE

Regarding the risk of Hazardous Building materials it is noted that all buildings to be removed or demolished were installed at the site post 2006 and therefore it is unlikely that these buildings will contain Hazardous Materials.

Notwithstanding if required a Hazardous Materials survey can be conducted prior to the commencement of the works.

6.5 UNEXPECTED FINDS PROTOCOL

An unexpected find can be defined as:

- Any unanticipated archaeological discovery e.g. aboriginal relics, items of significance, etc.;
- Buried or surface asbestos containing materials (Bonded, Friable or other);
- Buried waste materials e.g. medical waste, contaminated waste, etc.;
- Septic or underground storage tanks;
- Animal burial pits; or
- Discoloured and odorous soils and groundwater/seepage.

Should an unexpected find of potential contamination be encountered during the works, the following procedure should be followed:

- Identified finding by worker;

- Cease work as soon as safe to do so and move clear of the finding;
- Do not tamper or attempt to remove the finding;
- Contact Construction Management immediately;
- Site Management to delineate an exclusion or quarantine zone around the area using fencing and or appropriate barriers and signage;
- Preliminary assessment of the find and need for immediate management controls;
- Further assessment and/or remediation works are required and how such works are to be undertaken in accordance with contaminated site regulations and guidelines;
- Any unexpected finds must be documented, and records of volumes and types of materials identified removed from the site must be kept on file;
- Receipt documentation from the licensed facility confirming volume received.

7 WASTE MANAGEMENT PLAN APPLICATION

Project

The John Palmer Public School Upgrade, The Ponds

Address

85 The Ponds Boulevard
The Ponds NSW 2769

Applicant

Department of Education
School Infrastructure NSW
Level 8, 259 George Street
Sydney NSW 2000

Document Acceptance

The purpose of this CWMP is to meet the key waste requirements issues of the Secretary's Environmental Assessment Requirements (SEARs).

Details of Application

A 3-storey building that will replace 20 existing demountable classrooms on-site. Also, 8 new learning spaces, provision of an additional Support Learning Unit, new administration and staff facilities, a new purpose-built library, upgrades and additions to the existing School Hall Building and ancillary utility infrastructure and landscaping works. Finally, the proposed development will likely be undertaken in four stages (Stages 1, 2, 3 and 4).

Description of Buildings and Other Structures Currently on the Site

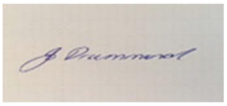
The retention of existing buildings and the temporary relocation on-site, and subsequent transfer off-site, of the twenty (20) existing demountable classrooms, which are to be removed.

Brief Description of Proposal

Formalisation of learning spaces in a new 3-storey building that will replace 20 existing demountable classrooms on-site. The proposed works will also provide 29 new learning spaces, provision of an additional Support Learning Unit, new administration and staff facilities, a new purpose-built library, upgrades and additions to the existing School Hall building, and ancillary utility infrastructure and landscaping works.

If Materials / Waste is Reused On-site or Off-site, how will it be re-used?

- Waste from the demolition and construction phases will be comingled and recycled off-site.
- Waste from the excavation will be recycled off-site and some reused on-site.
- Twenty (20) demountable classrooms to be removed and reused at another location during and after works conclude.
- Clean fill will be reused on-site after verification and soil testing.

Prepared by:	
Name:	Jo Drummond
Signed:	
Contact Number:	0412 214 233
Date:	13/10/2021

8 PROJECT PHASE

8.1 DEMOLITION

MATERIAL TYPE ON-SITE Waste Classification Construction and Demolition	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	Licensed Waste Depot, Recycling Outlet or Landfill Site
Brick and Concrete		80 m^3		Comingled	TBA	TBA
Asphalt			15 m^3	Comingled	TBA	TBA
Metal		30 m^3		Comingled	TBA	TBA
Plasterboard		25 m^3		Comingled	TBA	TBA
Timber		20 m^3		Comingled	TBA	TBA
Recovered Doors & Windows	55 units			Taken off for reusing in on-site containers	TBA	TBA
Tree Timber		20 m^3		Comingled	TBA	TBA
20 Demountable Classrooms and 2 x 20 m^3 containers	20 classrooms demountable 2 x 20 m^3 containers			Lifted off by crane to be reused	TBA	TBA
Sub Totals	Items as above	175 m^3	15 m^3			
Total	**190 m^3**					
Narrative: Removal of all 20 existing demountable classrooms for reuse. Internal refurbishment of existing building will be undertaken generating demolition waste.						

8.2 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	Licensed Waste Depot, Recycling Outlet Or Landfill Site
Organic Waste Trees & Shrubs		60 m^3		Separated to a designated Bin	TBA	Recycled
Clean Fill	100 m^3			Separated to a designated stockpile	TBA	Reused
Sub-Total	**160 m^3**					
Total	**160 m^3**					

Narrative: The proposed excavations on-site are minor excavation for footing piers and are expected to be reused on-site. Some trees and shrubs are to be lopped and recycled by the tree removal company. Excavated material removed from will require to be classified. Currently the Douglas Partners Geotechnical Investigation. September 2020 has been completed for the school. Excavation waste removed from site will be classified by a suitably qualified environmental consultant before disposal or reuse on the site.

8.3 CONSTRUCTION

CLASSIFICATION MATERIAL TYPE ON-SITE Waste Classification Construction and Demolition Liquid Waste	ESTIMATED WEIGHT (t) or VOLUME (m^3)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Landfill Disposal	Proposed Reuse and/or Recycling Collection Methods	Disposal / Transport Contractor	Licensed Recycling Outlet or Landfill Site
Concrete, Brick, Block Work, Render, Tiles, Stonework.		124 m^3		Co-mingled Bins	TBA	Crushed for road base
Metals		94 m^3		Co-mingled Bins	TBA	Scrap Metal Dealer for smelting
Timber Off-Cuts		120 m^3		Co-mingled Bins	TBA	Recycled for woodchips and mulch
Cardboard		184 m^3		Co-mingled Bins	TBA	Recycled into cardboard packaging
Plasterboard		132 m^3		Co-mingled Bins	TBA	Recycled as soil conditioner
Containers, Plastics, Plastic Packaging		72 m^3		Co-mingled Bins	TBA	Recycled into further plastic
Pallets And Reels	190 units			Co-mingled Bins	TBA	Returned to the supplier
Liquid Waste			16 m^3	Separated Container/Bin	TBA	Transferred to licenced landfill
General Waste			78m^3	Co-mingled Bins	TBA	Transferred to licenced landfill

CLASSIFICATION MATERIAL TYPE ON-SITE Waste Classification Construction and Demolition Liquid Waste	ESTIMATED WEIGHT (t) or VOLUME (m^3)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Reuse	Recycling	Landfill Disposal	Proposed Reuse and/or Recycling Collection Methods	Disposal / Transport Contractor	Licensed Recycling Outlet or Landfill Site
Floor Finishes Off-cuts carpet, vinyl, rubber, timber			22 m3	Co-mingled Bins	TBA	Transferred to licenced landfill
Paint Tins		10 m3		Co-mingled Bins	TBA	Scrap Metal Dealer for smelting
Landscaping	5 m3					
Sub Total	**5 m3** + 190 pallets	**736 m^3**	**118 m3**			
TOTAL	**854 m^3**			NB: An additional 190 pallets & reels (single units returned to suppliers for reuse).		

Narrative: This is a 3-storey modular building and partial fit-out. Works include library additions; new library, internal refurbishment of existing buildings landscaping and other ancillary works .There are no structural materials (steel & concrete), and the waste stream's weight is proportionately reduced. *As the contracts for all contractors have not been let there are still those including the waste contractor TBA.