CONSTRUCTION WASTE MANAGEMENT PLAN (CWMP)

NEW PRIMARY SCHOOL AT GOOGONG

SSD-10326042

REVISION NUMBER:

VERSION 3

REPORT DATE:

31/01/2022

SUBMITTED TO:

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DOCUMENT CONTROL				
ISSUE NUMBER	DATE	COMMENT	AUTHOR	REVIEW
VERSION 1	12/05/2021	Issue	Simon Lunn	Jo Drummond
VERSION 2	21/12/2021	Issue	Jo Drummond	Patrick Nolan
VERSION 3	31/01/2022	Update with client comments	Jo Drummond	Patrick Nolan

INTRODUCTION

OVERVIEW

This Construction Waste Management Plan (CWMP) accompanies an Environmental Impact Statement (EIS) pursuant to Part 4 of the Environmental Planning and Assessment Act 1979 (EP&A Act) in support of an application for a State Significant Development (SSD-10326042). This CWMP accompanies the CEMP as required by consent conditions for approved SSD.

The development is for a new primary school located on land bound by Gorman Drive, Aprasia Avenue, Wilkins Way and McPhail Way in Googong.

This report addresses the relevant Secretary's Environmental Assessment Requirements (SEARs), Development Consent condition B18 of SSD-10326042 as outlined in Table 1.

RESPONSE TO SSD

The CWMP is required by the Secretary's Environmental Assessment Requirements (SEARs) for SSD-10326042. This table identifies the SEARs and relevant reference within this report.

Table 1 – SSD Requirement & CWMP Page Reference

SSD-10326042 Item B18 Item Plus CEMP	Report Reference
(A) The recording of quantities, classification (for materials to be removed) and validation (for materials to remain) of each type of waste generated during construction and proposed use:	Page 8-10 PROJECT PHASE
(B) Information regarding the recycling and disposal locations	Page 10 PROJECT PHASE
(C) Confirmation of the contamination status on the areas of the site based on validation results	Page 9 PROJECT PHASE Douglas Partners Geo Tech Report Preliminary Site Investigation (Contamination) May 2021
CWMP Requirements	**Report Reference**
Identify, quantity and classify waste streams to be generated during construction.	Project Phase Pages 8,9,10
Identify appropriate servicing arrangements (including but not limited to, waste management, loading zones, mechanical plant) for the site.	Pages 3,4,
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.	Appendix A
Describe measures to be implemented to manage, reuse, and recycle and safely dispose of the waste.	Page 5

SSD-10326042 Item B18 Item Plus CEMP	Report Reference
To maximise reuse and recycling of demolition and construction materials and materials from development.	Page 4
To encourage building design techniques in general which minimise waste generation	Page 4
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	Page 10

PROJECT DESCRIPTION

The Proposal

The proposed development is for construction and operation of a new primary school in Googong that will accommodate up to 700 students.

The proposed development is a Core 35 school and includes:

- A collection of 1-2 storey buildings containing 30 home base units, 3 special education learning units, canteen, hall, library and administrative facilities.
- On-site carpark with 60 spaces and on-street kiss-and-ride facilities.
- Outdoor sports court and play area.
- Integrated landscaping, fencing and signage.

Site Description

The site is located at Aprasia Avenue, Googong, and is formally described as Lot 3 DP1179941 (refer to Figure 1). The site is irregular in shape and has an area of 28,118.39m^2.

The site is located within the Queanbeyan-Palerang Regional Council local government area approximately 10km south of the Queanbeyan Central Business District.

The site is bordered by Aprasia Avenue to the north, Gorman Drive to the southwest, Wilkins way to the east/southeast and McPhail way to the west.

Googong North Village Centre, which contains a child care centre, supermarket, cafes and take-away food outlets, is located approximately 100m west of the site across McPhail Way. The site is otherwise surrounded by low density residential development.

Googong is a recently developed town, with the planning beginning in the early 2000s and the first residents taking up residence in 2014.

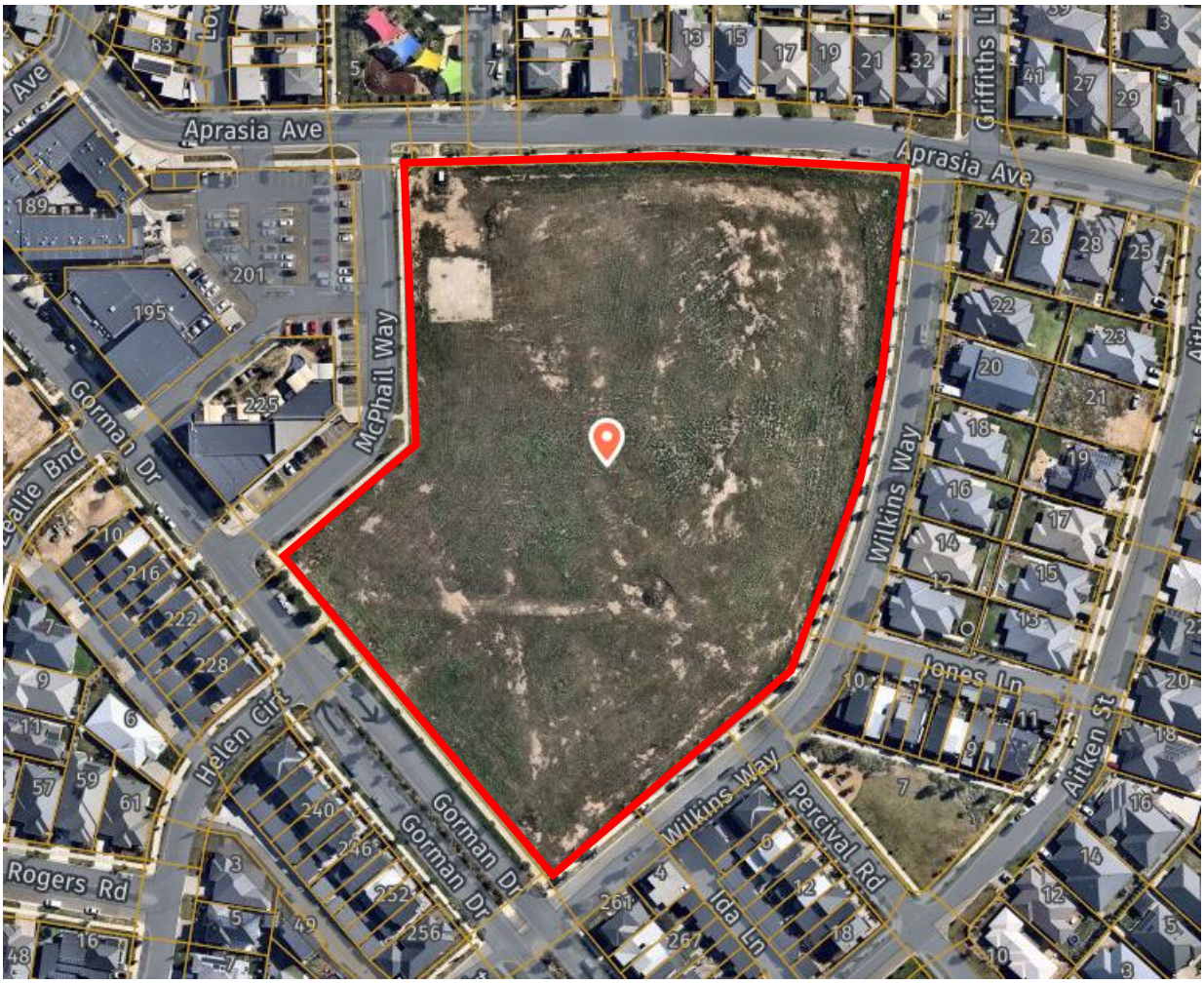

Figure 1 – Site aerial photograph *(Source: Nearmap)*

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.

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 and demolition 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 2.

Table 2 - Breakdown of Tasks and Responsibilities

Management Strategies	Responsibilities
Design:	
Use of modular components in design	Architect & Engineer
Use of prefabricated components in design	Architect, Builder,
Design for materials to standard sizes	Architect, Subcontractors
Design for operational waste minimisation	Architect & Builder
Consider ways to avoid, reuse and recycle construction wastes	Subcontractors.
Procurement:	
Select recycled and reprocesses materials	Architect, Engineer, Builder & Sub Contractors
Select components that can be reused after deconstruction	Architect, Engineer & Builder
Prioritise suppliers that take back offcuts and unused product.	Sub-Contractors
Encourage contractors and subcontractors that use unneeded offcuts and unused product for use on other jobs	
Ordering the right quantities of materials (Purchasing Policy);	Sub-Contractors
Include prefabrication of materials	

Management Strategies	Responsibilities
<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 & 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 demolition and 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.

UNEXPECTED FINDS PROTOCOL

The fill material encountered beneath the site would be suitable for on-site reuse;

Should any fill or stockpiled material be required to be disposed off-site, they must first be assessed in accordance with NSW EPA Waste Classification Guidelines Part 1 Classifying Waste (2014) and assigned a waste classification prior to off-site disposal. If unexpected finds occur the following procedure is required;

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.

WASTE MANAGEMENT PLAN APPLICATION

PROJECT:
New primary school at Googong
ADDRESS:
Lot 3, DP 1179941 Gorman Drive, Googong
OWNERS:
Schools 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 greenfield site and will be a completely new school.
BRIEF DESCRIPTION OF PROPOSAL:
The proposed development is for construction and operation of a new primary school in Googong that will accommodate up to 700 students.
IF MATERIALS / WASTE IS REUSED ON SITE OR OFF SITE, HOW WILL IT BE RE-USED:
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.

	Name	Signed	Contact Number	Date
Prepared by:	Jo Drummond		0412214233	31/01/2022

PROJECT PHASE

DEMOLITION

Material Type on Site	Estimated Volume (m^3) or Weight (t) (Most Favourable → Least)		ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Recycling	Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Licensed Waste Depot, Licensed Recycling Outlet or Licensed Landfill site
Concrete Existing Kerbs	8 m^3		Removed from site and recycled	TBA	TBA
Metal, Steel reinforcement, signs, poles & railing	2 m^3		Removed from site and recycled	TBA	TBA
Bitumen /Ashfelt	15 m^3		Removed from site and recycled	TBA	TBA
Subtotal	**25m3**	**Nil**			
Total	**25m3**				
Narrative: There is a small area of existing pavement and roads for removal.					

EXCAVATION

Material Type on Site	Estimated Volume (m^3) or Weight (t) (Most Favourable → Least)			ON-SITE TREATMENT	OFF-SITE TREATMENT	
	Cut	Fill	Disposal	Proposed reuse and/or recycling collection methods	Disposal / Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Excavated Natural Material (ENM) Greenfield site	12,456	Reused 8,457	3,999 plus 4,126 Stripping Volume	Reuse for landscaping	TBA	TBA
TOTAL	8,125 m^3					

Narrative: Excavation of ENM will be used back on the site for landscaping where required and the remaining will be removed from site. This material will be covered to reduce soil displacement and prevent air pollution.

The Douglas Partners Preliminary Site Investigation (Contamination) New Primary School in Googong Aprasia Avenue, Googong identified the following potential sources of contamination and associated contaminants of potential concern (COPC):

- S1: Fill: associated with construction of Googong Township.
  - o COPC include metals, total recoverable hydrocarbons (TRH), benzene, toluene, ethylbenzene, xylene (BTEX), polycyclic aromatic hydrocarbons (PAH), polychlorinated biphenyls (PCB), organochlorine pesticides (OCP), phenols and asbestos.
- S2: Storage and use of materials/chemicals within the construction compound
  - o COPC include lead, TRH, BTEX, PAH, and volatile organic compounds (VOC).
- S3: Potential pesticide use associated with historical use of the site for grazing.
  - o COPC include arsenic and OCP/OPP.

Should suspected asbestos containing materials be encountered at the site, the affected area should be fenced off and assessed by a licensed asbestos assessor;

Fill or stockpiled material required to be disposed off-site, must first be assessed in accordance with NSW EPA Waste Classification Guidelines Part 1 Classifying Waste (2014) and assigned a waste classification prior to off-site disposal.

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 / Transport Contractor	Waste Depot, Recycling Outlet or Landfill site
Concrete Brick Block-work & Tile		165m^3		Co-mingled Bins taken to Waste Transfer Station	Tiger Waste	Crushed for road base
Metals		85m^3			Tiger Waste	Scrap Metal Dealer for smelting
Timber off-cuts		175m^3			Tiger Waste	Recycled for chips and mulch
Cardboard		142m^3			Tiger Waste	Recycled into cardboard
Plasterboard		165m^3			Tiger Waste	Recycled as soil conditioner
Plastics, plastic packaging, paint drums*, containers		75m^3	30m^3		Tiger Waste	- Styrene and plastic to landfill * Paint drums nested and recycled
Pallets and Reels	65 units			Separated onsite	Tiger Waste	Returned to the supplier
Liquid Waste			20m^3	Separated onsite	Tiger Waste	Transferred to licenced landfill L0023
General Waste			151m^3	Co-mingled Bins taken to Waste Transfer Station	Tiger Waste	Transferred to licenced landfill L0023
Sub Total	**NB: 60 units**	**807 m^3**	**201m^3**			
TOTAL	**1008m^3**			**NB: Plus, an additional 65 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

All waste collected by Tiger Waste is delivered to their ACT Government licenced waste sorting facility in Fyshwick. The waste is sorted by mechanical grabs before it is screened and processed through our new, best practice waste picking station. The recyclable materials are delivered to local and regional licenced recyclers, whilst the landfill waste is transported daily to the Veolia operated Woodlawn Bioreactor.

APPENDIX A DEMOLITION AND CONSTRUCTION WASTE PLAN DRAWING