



*environmental management
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CONSTRUCTION WASTE MANAGEMENT PLAN (CWMP)

REDEVELOPMENT OF RYDE SECONDARY COLLEGE



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SCHOOL INFRASTRUCTURE NSW



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DISCLAIMER

This report is based on information provided by Lipman.

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	AUTHOR	REVIEW	APPROVED BY
DRAFT	24/08/2022	Patrick Nolan	Jo Drummond	Jo Drummond
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1 INTRODUCTION

1.1 PURPOSE OF THE REPORT

This Construction Waste Management Plan (CWMP) forms part of an environmental assessment under Part 5 of the *Environmental Planning and Assessment Act, 1979* for proposed upgrades to Ryde Secondary College. The proposed works are deemed permitted without consent by Section 3.37 of the *State Environmental Planning Policy (Transport and Infrastructure) 2021*, which provides that:

- (1) *Development for any of the following purposes may be carried out by or on behalf of a public authority without development consent on land within the boundaries of an existing school –*
 - (a) *Construction, operation or maintenance, more than 5 metres from any property boundary with land in a residential zone and more than 1 metre from any property boundary with land in any other zone, of –*
 - (ii) *a portable classroom (including a modular or prefabricated classroom that is not more than 2 storeys high*
 - (b) *Minor alterations and additions...*
 - (e) *demolition of structures or buildings*

1.2 RYDE SECONDARY COLLEGE

Ryde Secondary College is located at 5 Malvina Street, Ryde (Lot 284 and 285 in DP752035) within the City of Ryde Local Government Area. Ryde Secondary College has approximately 1,362 students currently enrolled. An aerial photograph of the site is provided in **Figure 1** below.

Existing development includes single and double storey classrooms buildings, a multipurpose hall, covered outdoor learning areas, sports courts, demountable classrooms, landscaping, pathways and hardstand areas, vehicle circulation and carparking.

The site has frontage to Malvina Street (north-western boundary) and Forrest Road (north-eastern boundary) with low density residential development along the opposite road frontages. The site adjoins low density residential on the south-western boundary, Buffalo Creek along the southern boundary and Barton Reserve along the south-eastern boundary.



Figure 1 Aerial Photograph

1.3 Proposed Upgrade:

The scope of works subject to this environmental assessment are known as Stage 1 works in the master-planned redevelopment of Ryde Secondary College. Stage 1 works include:

- The Demolition has been undertaken by demounting the modular demountable building previously on the same site, in the vicinity of the proposed pavilion to be constructed;
- Minimal excavation soil to remain on site ;
- The Construction phase wo (2) storey pavilion building comprising:
 - Thirteen (13) GLS;
 - Learning commons;
 - Fitness lab;
 - Seminar spaces;
 - Staff room;
 - Store; and
 - Change rooms;
- Lift, stair and ramp access; and
- Associated adjustments to the existing sports court;

2 OBJECTIVES OF THE CWMP

The Objectives of the CWMP include:

- a) Identify, quantify 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 waste.

3 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);
- Review of Environmental Factors
- Part 5 of the Environmental Planning and Assessment Act, 1979 for proposed upgrades to Ryde Secondary College.
- Section 3.37 of the State Environmental Planning Policy (Transport and Infrastructure) 2021

- NEPC National Environment Protection (Assessment of Site Contamination) Measure 1999 (as amended 2013) [NEPM] (NEPC, 2013); and
- NSW EPA Guidelines for Consultants Reporting on Contaminated Land (NSW EPA, 2020).

3.1 REVIEW OF ENVIRONMENTAL FACTORS

Table 1 – Review of Environmental Factors

Requirement	Report Reference
Construction Waste Management Plan for excavation/construction works need to address any findings or recommendations of any other consultant reports (e. g. contamination).	REF Douglas Partners Preliminary Site Investigation (Contamination) Report Section 5.4 Management of Hazardous Waste Section 5.5 Unexpected Find Protocol
Consultant reports will need to include recommendations to avoid identified adverse impacts and where impacts cannot be avoided, how impacts can be minimised and/or mitigated.	REF Douglas Partners Preliminary Site Investigation (Contamination) Report <i>It is considered that the site can be made suitable for the proposed development subject to the following recommendations:</i> <ul style="list-style-type: none"> • <i>Formal waste classification of any soils prior to off-site disposal (e.g., once stockpiled) to confirm the previously provided preliminary in situ classification.</i> • <i>Any assessment should consider higher sampling densities where asbestos containing materials are suspected to be present in any soils (e.g., within the footprint or near former demountable structures);</i> • <i>Development of an asbestos management plan / unexpected finds protocol for use during earthworks.</i>
Waste Management Plan for excavation / construction works need to address and site any findings or recommendations in the Waste Management Plan	No excavation is planned only areas for footings. The soil will remain on site and reused. Ref Douglas Partners Preliminary Site Investigation (Contamination)

4 WASTE MANAGEMENT COMPLIANCE

The current NSW 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 contracted 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 during the , 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 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 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 to increase bin supply if there is an unexpected increase in waste generation.

Monthly reports will be provided to site managers to ensure these targets are getting met for the duration of the project.

4.1 CONSTRUCTION WASTE MANAGEMENT EQUIPMENT, BIN SIZES AND COLLECTION FREQUENCY

All waste will be removed by a licensed waste contractor using on site skip bins. The construction waste will be removed when bins are full and within the construction site operating hours to reduce disturbance of the neighbours. Locations of proposed construction waste bins are provided in Appendix A.

5 WASTE MANAGEMENT STRATEGIES

5.1 ROLES AND RESPONSIBILITIES

The waste management strategy for the project will operate over the design, procurement, and construction including; the fit-out of the project and is detailed below in Table 2.

Table 2 – Breakdown of Tasks and Responsibilities

Management Strategies	Responsibilities
Design	
<ul style="list-style-type: none"> • Use of modular components in design • Use of prefabricated components in design • Design for materials to standard sizes • Design for operational waste minimisation 	<ul style="list-style-type: none"> • Architect & Engineer • Builder, Sub Contractors.
Procurement	
<ul style="list-style-type: none"> • Select recycled and reprocesses materials • Components that can be reused after deconstruction 	<ul style="list-style-type: none"> • Architect, Engineer, Builder & Sub Contractors
Pre-construction	
<ul style="list-style-type: none"> • Waste management plan to be reviewed & approved prior to construction. • Contract a Waste Contractor 	<ul style="list-style-type: none"> • Builder • Waste Contractor
Construction on site	
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Builder & Waste Contractor • Sub-contractors

5.2 ON-SITE WASTE MANAGEMENT AND STORAGE 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:

- Construction waste storage is contained wholly within the site;
- 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.

5.3 REUSE OF 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 brushes and rollers (wrapped in plastic to maintain moisture);
- Plasterboard off cuts; and
- Cardboard boxes.

Clean fill will be reused on site after verification by conducting soil testing that meets the appropriate waste classification standards.

5.4 MANAGEMENT OF HAZARDOUS WASTE

Reference *Douglas Partners Report on Preliminary Site Investigation (Contamination) Ryde Secondary College Stage 1 Works*, 5 Malvina Street, Ryde Prepared for NSW Department of Education Project 215190.01 August 2022;

It is therefore considered that the site can be made suitable for the proposed development subject to the following recommendations:

- *Formal waste classification of any soils prior to off-site disposal (e.g., once stockpiled) to confirm the previously provided preliminary in-situ classification. Additionally, any assessment should consider higher sampling densities where asbestos containing materials are suspected to be present in any soils (e.g., within the footprint or near former demountable structures); and*
- *Development of an asbestos management plan/unexpected finds protocol for use during earthworks.*

All excavation waste removed from site will be classified by a suitably qualified environmental consultant as per Waste Classification Guidelines Part 1: Classifying Waste NSW EPA 2014 including:

- Virgin excavated natural material;
- ENM in accordance with Excavated Natural Material Order 2014;
- Asbestos;
- Disposal docketts (for non VENM/ENM) from landfill will be provided and kept in a Waste Data File on site;
- Material tracking/docketts will be provided for VENM/ENM;
- Disposal facility will have appropriate licence to receive the waste in accordance with the waste classification; and
- If required a Asbestos Management Plan will be prepared.

A Waste Data File will be maintained on-site and all entries will include hazardous waste stating the following:

- The classification of the hazardous waste;
- The license of the facilities that can accept the hazardous waste material;
- 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; and
- Disposal docketts.

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.

5.5 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.



6 WASTE MANAGEMENT PLAN APPLICATION

Project

Ryde Secondary College Stage 1 Works
5 Malvina Street, Ryde.

Prepared for:

NSW Department of Education
Project; 215190.01.

Address

5 Malvina Street, Ryde.

Applicant

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

Details of Application

Two (2) storey pavilion building comprising:

Thirteen (13) GLS;

- Learning commons;
- Fitness lab;
- Seminar spaces;
- Staff room;
- Store; and
- Change rooms & toilets;
- Lift, stair and ramp access; and
- Associated adjustments to the existing sports court.

Description of Buildings and Other Structures Currently on the Site

The materials excavated on-site to insert foundations, re-landscape, lay pathways, or public areas, are in preparation for the modular assembled of the new permanent two-level building. Once the clean-fill has been tested for contamination, clean fill maybe stockpiled and reused for fill around the new building's foundations. The blockwork from the terraced adjacent area will be recycled or reused off-site.

Prepared by

Name:	Jo Drummond	Contact Number:	[REDACTED]
Signed:	[REDACTED]	Date:	8/09/2022

7 PROJECT PHASE

7.1 DEMOLITION

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
<p>NB: There is no demolition to be undertaken on-site. There was previously a temporary modular classroom block that has been removed prior to commencing the current works. The site is a green-fill site with some terraced stone and blockwork to be excavated and stockpiled for removal from site for reuse, which is identified in the following section on Excavation.</p>						
Sub-Total	N/A					
Total	N/A					
<p>Narrative: See NB above.</p>						

7.2 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	Waste Depot, Recycling Outlet or Landfill site
Excavated Natural Material (ENM) Greenfield Site	10 m ³			Separated to designated stockpiles and reused on site	N/A	Reused on-site
Stacked stone slabs from site		25m ³		Separated to designated stockpiles and reused on site	N/A	TBA
Sub-Total		35 m³				
Total		35 m³				

Narrative: The location of the excavation on-site is a pre-existing greenfield site, which had a temporary building with classrooms that has been removed. The soil excavated on-site to insert foundations, re-landscape, lay beneath pathways, or public areas, in preparation for the modular assembled of the new permanent two-level building. Once the clean fill has been tested for contamination, clean fill maybe stockpiled and reused around the new building’s foundations. The blockwork from the terraced adjacent area adjacent to the build site, will be recycled or reused off-site.

Reference: Douglas Partners Report on Preliminary Site Investigation (Contamination) Ryde Secondary College Stage 1 Works5 Malvina Street, Ryde Prepared for NSW Department of Education Project 215190.0

‘It is therefore considered that the site can be made suitable for the proposed development subject to the following recommendations: • Formal waste classification of any soils prior to off-site disposal (e.g., once stockpiled) to confirm the previously provided preliminary in situ classification. Additionally, any assessment should consider higher sampling densities where asbestos containing materials are suspected to be present in any soils (e.g., within the footprint or near former demountable structures); and • Development of an asbestos management plan / unexpected finds protocol for use during earthworks.’

7.3 CONSTRUCTION

MATERIAL TYPE ON SITE	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	Recycling Outlet or Landfill site
Concrete, Brick, Block Work, Render, Tiles & Slurry		15m ³		Co-mingled Bins	TBA	TBA
Metal off-cuts & Hand railings, Roof		8m ³		Co-mingled Bins	TBA	TBA
Timber Off-Cuts		12m ³		Co-mingled Bins	TBA	TBA
Cardboard		15m ³		Co-mingled Bins	TBA	TBA
Plasterboard		8m ³		Co-mingled Bins	TBA	TBA
Containers, Plastics, Plastic Packaging & Plastic piping			8 m ³	Co-mingled Bins	TBA	TBA
Pallets And Reels	40 units			Co-mingled Bins	TBA	TBA
Liquid Waste			300 Litres	Separated Container/Bin	TBA	TBA
General Waste			10 m ³	Co-mingled Bins	TBA	TBA
Sub Total		58m ³	18m ³	Waste to landfill is 18m ³ plus 300 litres of liquid waste		
TOTAL		76m³		40 units of pallets and reels are to be returned and reused by the suppliers		
<p>Narrative: As the new build is composed of an assembly of prefabricated modular components into a permanent two-level building, the construction waste generated is estimated above. The in-ground works, delivery packaging and timber off-cuts are likely to comprise most of the recyclable waste by volume.</p>						

APPENDIX A: ALLOCATED CONSTRUCTION WASTE COLLECTION

